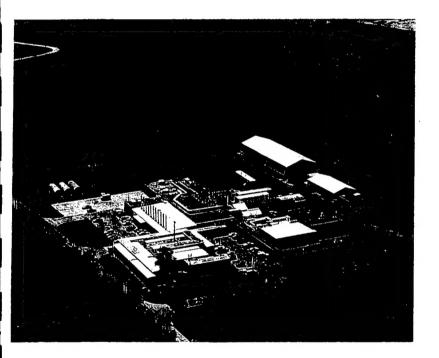
REPORT

FINAL REPORT



Task 92-31: Establishment of the

Porcine Isolated Perfused Skin

Flap Model as a Decision Tree

Network Screening Module for

Assessing the Efficacy of Systemic

Antivesicant Pretreatment and

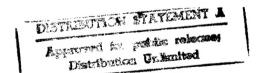
Treatment Compounds

To

U.S. Army Medical Research

and Development Command

May, 1997





REPORT DOCUMENTATION PAGE

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FINAL REPORT

Contract DAMD17-89-C-9050 A Medical Research and Evaluation Facility (MREF) and Studies Supporting the Medical Chemical Defense Program

on

TASK 92-31:

ESTABLISHMENT OF THE PORCINE ISOLATED PERFUSED SKIN FLAP MODEL
AS A DECISION TREE NETWORK SCREENING MODULE
FOR ASSESSING THE EFFICACY OF SYSTEMIC ANTIVESICANT
PRETREATMENT AND TREATMENT COMPOUNDS

to

U.S. ARMY MEDICAL RESEARCH AND MATERIEL COMMAND

May, 1997

T. H. Snider P. H. Kinney J. B. Johnson

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In conducting the research described in this report the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals" prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Animal Resources, National Research Council (U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health (NIH), Publication No. 86-23, revised 1985).

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Executive Summary

The isolated, perfused porcine skin flap (IPPSF, or "flap") model was developed at the Cutaneous Pharmacology and Toxicology Center, College of Veterinary Medicine, North Carolina State University (NCSU-CPTC). The model involves surgical resection of an area of inguinal skin, and the apposition and suturing of skin margins to form a single-pedicle, tubular flap that is left attached to the pig. Two days later the flap is harvested by arterial cannulation and separation from the pig and perfused for up to 9 hr in an environmentally controlled chamber. Personnel at NCSU-CPTC designed the IPPSF model for studying the transdermal kinetics of topically applied xenobiotics. They have also used the model to study the dermatotoxicity of sulfur mustard (HD) at exempt chemical surety level concentrations (less than 10 mg/mL). The objective of Task 92-31 was to transfer the IPPSF technology to Battelle for use in examining the dermatotoxicity of HD at surety levels and for establishing a test paradigm for screening candidate prophylactic and therapeutic countermeasures.

An animal room at Battelle's Medical Research and Evaluation Facility (MREF) was remodeled as a surgery unit, and MREF personnel traveled to NCSU-CPTC to receive training on flap surgery, harvesting, and perfusion. Once procedures were established at the MREF, a perfusion technician from NCSU-CPTC visited Battelle and made several suggestions for improving the perfusion techniques. Based on the appearance of the flaps and examination of a set of physiologic data from previous healthy flaps, the technician indicated that the technology transfer appeared successful.

In a subsequent set of experiments, the metabolism of most flaps, including naive (untreated) and ethanol controls as well as those treated with HD in ethanol, exhibited a slow decline beginning approximately 2 hr after perfusion was started. The anticipated effects from treatment with HD in ethanol, i.e., increased vascular resistance, decreased metabolism, grossly observable blisters, and histologic evidence of increased incidence of epidermal-dermal separation and dark basal cells, were not observed. Consultation with NCSU-CPTC staff and inspection of Battelle standard operating procedures and methods suggested several modifications in technique, including prolonged flushing of flaps to assure removal of red blood cells (RBCs) prior to

perfusion. Subsequent flap preparation also failed to respond to HD as expected. Flaps perfused with a media made with bovine serum albumin (BSA) from a different source exhibited increased vascular resistance during the middle and end of perfusion sessions, increased incidence of epidermal-dermal separation, dark basal cells, and frank blisters, but these changes were independent of topical flap treatment.

MREF personnel were not able to consistently duplicate the dermatotoxic effects of HD applied on IPPSFs as reported by NCSU-CPTC. Results indicated that the flap appeared to be highly sensitive to individual animal variations in vascular anatomy, the extent of RBCs retained after extensive flushing, and media composition and pH. The inherent variability of the model, coupled with its relatively weak response to HD, indicated that it would be unsuitable for assessing the efficacy of candidate prophylactic and therapeutic countermeasures against topically applied HD. The IPPSF should be an excellent model, however, for estimating skin penetration by xenobiotics.

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TASK 92-31:

ESTABLISHMENT OF THE PORCINE ISOLATED PERFUSED SKIN FLAP MODEL AS A DECISION TREE NETWORK SCREENING MODULE FOR ASSESSING THE EFFICACY OF SYSTEMIC ANTIVESICANT PRETREATMENT AND TREATMENT COMPOUNDS

1.0 Introduction

Personnel from the U.S. Army Medical Research Institute of Chemical Defense (USAMRICD) considered using the isolated, perfused porcine skin flap (IPPSF) model for studying the dermatotoxicity of sulfur mustard (HD). The IPPSF model was developed at the Cutaneous Pharmacology and Toxicology Center in the College of Veterinary Medicine at North Carolina State University (NCSU-CPTC).^{1, 2} The IPPSF, or simply "flap", is produced by incising an elliptical area of ventral abdominal skin on a female weanling pig and suturing together the lateral and ventral edges to form a single-pedicle, tubular flap with circulation intact. The tissue is allowed to heal for two days, and then excised and placed into an environmentally controlled perfusion chamber. Physiological parameters, including glucose utilization, lactate production, and vascular resistance may be monitored. This technique provides a skin model with normal anatomical structure and microcirculation. Researchers at NCSU-CPTC have shown that this model produces microvesication upon exposure to hemisulfur mustard³ or sulfur mustard (HD)^{4, 5, 6, 7, 8, 9}

The objectives of this work were to transfer this technology to Battelle's Medical Research and Evaluation Facility (MREF) and to develop it for evaluating systemic prophylactic and therapeutic treatments (SP&TTs) against topical exposure to HD.

These objectives were to be accomplished over the course of four phases:

Phase I (Technology Transfer)

- attend training sessions at NCSU-CPTC and learn the surgical and perfusion techniques,
- Purchase equipment and modify a room in the MREF for this non-invasive surgery,

- Write standard operating procedures (SOPs) and methods based on documents from NCSU-CPTC, and
- Practice producing and perfusing flaps.

Phase II (Validation)

- Produce and perfuse a statistically relevant number of naive (i.e., no insult applied)
 flaps, and
- Compare the physiologic data with controls from NCSU-CPTC.

Phase III (Decision Tree Network Module Development)

• Develop an experimental procedure that could be used to effectively discriminate among candidate SP&TTs their ability to protect against HD-induced injury.

Phase IV (Test Material Evaluation)

Evaluate and rank order up to seven SP&TTs.

2.0 Materials and Methods

Materials and methods employed in this study are described in MREF Protocol 97, entitled "Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds" (Appendix A of this report).

2.1 Chemical Surety Materiel

approximately 91.5 percent. Dilutions of HD, made in anhydrous ethanol at target concentrations of approximately 10 and 50 mg/mL, were analyzed by MREF chemists prior to use on study. At the completion of each flap dosing session, a sample of HD diluted in ethanol was dispensed from the dosing device into a 10-mL volumetric flask, and the flask filled to the quantity sufficient line with ethanol. After the volumetric flask was capped and the contents mixed by inverting the flask

several times, samples were aliquoted into glass vials for analysis by gas chromatography. The analyses, expressed as a percent of the expected concentrations, are presented as a dose control chart with 95 percent upper and lower limits in Figure 1 (Appendix B). The mean of all HD dose samples was 95 percent of expected concentrations.

Methods for the surgical production and harvesting of the IPPSF, and for set up, preparation, maintenance and cleaning of the IPPSF perfusion chamber, are described in MREF SOPs and methods listed in Table 1 (Appendix C). These were written based on documents obtained from NCSU-CPTC and the training received there. Typically, two flaps were raised and harvested from each pig. Each flap was cannulated and placed in an environmentally-controlled perfusion chamber within a fume hood.

2.2 Test Animals

Female, weanling specific pathogen free (SPF)Yorkshire swine (18 to 32 kg) were obtained from two local suppliers. The first 27 swine used in the task were obtained from Shady Side Farms (Powell, OH). The remainder, 43 swine, were obtained from Isler Genetics (Prospect, OH). The herds of both suppliers were certified by the National SPF Swine Accrediting Agency (Conrad, IA) to be free of pneumonic lesions, brucellosis, swine dysentery, turbinate atrophy, pseudorabies, lice, and mange. The changing of supplier was to determine whether the source of the weanling swine and the inherent differences, including genetics and environmental factors such as time spent out-of-doors, had a significant impact on flap physiology.

Housing at the MREF consisted of raised nursery decks (Palco, Belle Plaine, IA). Each shipment of swine was held in isolation and observed for clinical illness for at least 7 days prior to study initiation. Each pig was given either Purina or another veterinarian-approved swine feed at a daily rate of 2 to 3 percent of its body weight. Tap water was provided *ad libitum* in the holding pens. Each pig was anesthetized and taken to a surgery suite for IPPSF production, and two days later for IPPSF harvesting. Heart rate, respiratory rate, and body temperature were monitored during these procedures. After each surgery following recovery from anesthesia, the pig was returned to its cage.

2.3 IPPSF Production

Each pig was transported into the surgical preparation area and premedicated intramuscularly (i.m.) with atropine sulfate (1.5 mg/kg) followed by an i.m. injection of xylazine (4.4 mg/kg) and telazol (2.2 mg/kg). The pig was intubated, and anesthesia was maintained with halothane. An intravenous catheter was installed in a marginal ear vein to provide lactated Ringer's solution at approximately 120 mL/hr. The pig was prepared for aseptic surgery in the caudal abdominal and inguinal regions using Betadine, isopropanol, and sterile water. Flaps were raised bilaterally and simultaneously. For each flap, a sterile marking pen was used to place reference marks on the skin in the caudolateral flank region. Skin incisions were made around the caudal superficial epigastric artery within an approximately 4- by 12-cm rectangle. Lartger superficial vessels were ligated and cut, and minor vessels were cauterized. Subcutaneous tissue was dissected away from the skin. Dissection continued until the only tissue connecting the flap to the donor was the caudal superficial epigastric artery, paired venae comitantes, and immediate connective tissue. Starting at the caudal end, the lateral and ventral sides of the flap were apposed and sutured together. Fat was trimmed away from the flap edges, if necessary. In the remaining wound, three tissue layers were separately apposed and sutured together in sequence: deep subcutaneous tissues, superficial subcutaneous tissues, and skin incision edges. A skin sample was collected from the left wound site lateral to the flap and placed into 10 percent neutral buffered formalin solution (NBFS). This skin sample was processed for examination by light microscopy and served as a general histology control for that animal. The flap was sutured to the cranial end of the wound to immobilize it and the wound site and flap were bandaged. The pig was allowed to recover from anesthesia and returned to its pen.

2.4 IPPSF Harvesting

Two days after flap production, the pig was anesthetized as before (but without atropine and without installation of an intravenous catheter). A 3-mL volume of 1,000 U.S.P. units/mL of heparin was administered in a marginal ear vein. Care was taken during site cleaning to ensure

that scrub solution did not contact the flaps. The left flap was harvested, followed by the right flap. Sutures were removed from the base of a flap, and the flap lifted slightly away from the donor surface with vessels intact. The superficial epigastric artery was cannulated with polyethylene tubing (I.D. 0.58 mm, O.D. 0.97 mm). Other connecting tissues were severed, and the flap perfused with heparinized normal saline warmed to approximately 37 C. The wound was intentionally not closed because previous experience had shown that not closing improved overall healing and decreased the incidence of abscess formation. The pig was allowed to recover from anesthesia and returned to its pen.

2.5 Perfusion Chamber Features

An acrylic chamber (USA/Scientific Plastics, Ocala, FL) similar to, but shorter than, the model used at NCSU-CPTC was designed. The MREF model was approximately 53 cm wide, 33 cm deep, and 29 cm tall as illustrated with equipment in Figure 2 (Appendix B). Internal parts could be accessed by any of three routes:

- To allow chamber cleaning, the entire front panel could be removed by loosening three thumbs screws at the top and sliding out the removable hinge pins at the bottom;
- The front panel included a sliding door that allowed manual adjustments without causing significant changes in chamber temperature and humidity;
- The top of the chamber included a removable access panel for dosing the flap.

The perfusion chamber was elevated for in-hood use on 10-cm tall legs to allow air flow. Environmental conditions were controlled at approximately 37 C and 40 percent relative humidity with a custom-built temperature/humidity control unit (Al Love & Associates, Raleigh, NC). Heated, humidified air entered the chamber through a hose at the lower front corner of the right-side panel, exited through a hole in the upper left corner of the back panel, and was cycled back to the control unit via a return hose. Temperature and relative humidity were monitored with a

probe mounted on the back panel and wired to a model HI 8564 Thermo-Hygrometer (Hanna Instruments, Woonsocket, RI).

2.6 Nutrient Media Flow in the Perfusion Chamber

The flow of nutrient perfusion media (Table 2) to the flap was powered by a peristaltic pump (Manostat, New York, NY). Two acrylic reservoirs in the chamber and all tubing and connectors were filled with perfusion media. The venous reservoir, on the left, was periodically filled from outside the chamber through a piece of Tygon® tubing, 0.397-cm OD, 0.238-cm ID. Tygon tubing connected the venous reservoir to an approximately 150-cm length of 0.24-cm OD, 0.16-cm ID silicon tubing housed in an oxygenation chamber. Thin-walled silicon tubing was used by NCSU-CPTC scientists to allow penetration of oxygen and carbon dioxide which were supplied to the media at approximately two bubbles per second from a tank containing 95 percent oxygen and 5 percent carbon dioxide.

Tygon tubing connected the efferent side of the oxygenation chamber to an arterial reservoir. The arterial reservoir was mounted over a stirring plate and contained a stir bar and a pH/thermistor probe wired to an Accumet model 955 portable pH/mV temperature meter (Fisher Scientific Co., Pittsburgh, PA) mounted on the chamber. Seals around the ports prevented air from entering the arterial reservoir since the pump produced a negative pressure in the reservoir.

Tygon tubing carried the media from the arterial reservoir through the right chamber panel past a media sampling port to the pump. A section of silicon tubing (0.24 cm ID, 0.40 cm OD) was used in the pump. Tygon tubing carried the media back through the right chamber panel to three probes in series:

- An in-line flow probe that was wired to a base unit (Transonic Systems Inc., Ithaca, NY),
- A pressure transducer wired to a Propaq model 106EL patient monitor unit,
 (Protocol Systems, Inc., Beaverton, OR), and
- A thermistor housed in a Teflon coupler and wired to the Propaq unit.

A final section of Tygon tubing carried the media to a three-way stopcock with Luer fittings. The flap cradle on a support stand was placed under the top access panel near the stopcock. When the flap was mounted in the cradle, the stopcock was fitted into the needle attached to the cannulation tubing. Media entered the flap though the superficial epigastric artery which normally perfused all but the extreme tip of the flap tissue, and exited the flap via venules draining from the proximal end of the flap. The used media collected in a rectangular pool machined into the lower end of the cradle near the proximal end of the flap. At approximately 1-min intervals, the accumulated used media drained through a port in the bottom of the pool. A section of Tygon tubing carried the media through the left chamber panel, past a stopcock, and into a receptacle waste bottle.

2.7 Calibrations and Perfusion Chamber Preparations

Periodically between experiments, the Propaq pressure instrument was calibrated against a column of water. Before each experiment, the pH meter was calibrated with pH 4.00 and pH 10.00 standards. The arterial reservoir cap, with the pH probe seated through it, was attached to the reservoir to form a sealed vessel. Quick disconnect fittings (Colder Products Co., St. Paul, MN) on the ends of tubing sections, and at reservoirs and the oxygenation chamber allowed for tubing disconnection without loss of media. All sections of tubing were connected in series independent of the reservoirs, and filled by aspirating media from a filling beaker with a 30-cc syringe. The tubing sections then were connected to the reservoirs and the oxygenation chamber. The pressure and flow meters were zeroed. A section of Tygon tubing was temporarily attached to the distal stopcock, and the free end was placed into a 10-mL graduated cylinder. The pump was powered on, and the flow meter was checked with volume per unit time. The pump was adjusted to deliver, and the flow meter was calibrated to read, 1.0 mL/min. After calibration, the pump was powered off, and the free end of the tubing was attached to the venous reservoir, thus completing a media circuit. The pump was powered on, and media circulated through the system until the flap arrived from surgery, typically approximately 10 min later.

The height of the flap cradle stand was adjusted so there was no change in elevation from the pressure transducer to the point of media entry into the flap. Thus, the pressure at the transducer and flap was the same. Due to the peristaltic action of the pump, the pressure in the system oscillated with a period of approximately 0.8 sec with normally approximately 10 mm Hg between the extremes. The Transonic base unit displayed both the real-time pressure and the integrated mean pressure calculated every 5 sec.

Media assays for glucose and lactate concentration were performed simultaneously in a model 2700 SELECT Biochemistry Analyzer (Yellow Springs Inc., Yellow Springs, OH) with dual ion selective membranes. The instrument was maintained and calibrated with standard solutions daily.

The media in the arterial reservoir was maintained at a target pH of 7.35 by periodic adjustments with 1 N hydrochloric acid or 1 N sodium hydroxide solutions injected with a syringe through a stopcock and a section of Tygon tubing connected to the arterial reservoir.

Adjustments were usually made when the media pH exceeded 7.4, as the constant stirring of media in the arterial reservoir persumably caused a degassing of carbon dioxide, thus increasing the pH.

2.8 Preparation of the IPPSF for Perfusion

After a flap was cannulated and excised from a pig, it was flushed with heparinized normal saline, weighed, flushed again, and placed on a cradle in a perfusion chamber. The pump was powered off, and the temporary tubing between the stopcock and venous reservoir was removed. The cannulation needle hub was attached to the stopcock, and the pump was powered on. The flap was given an acclimation period of nominally 1 hr. If the pressure meter indicated a pressure greater than 50 mm Hg, the flap was adjusted to minimize any internal constriction of the cannulated artery. Usually a slight pulling of the flap away from the tubing put slight tension on the interior vessels and straightened any crimps. The pressure usually decreased as the flap warmed to chamber temperature. If the baseline pressure was greater than 50 mm Hg at the end

of the 1-hr acclimation period, the flap was not used. This was the same criterion for flap rejection used by personnel at NCSU-CPTC.

A dosing template was constructed of two layers of Stomahesive® (ConvaTec, Princeton, NJ) cut in rectangles with 6-cm x 2.5-cm outside edges, 5-cm x 1.5-cm inside edges, and a 0.5-cm wide perimeter. The template was adhered to the dorsal surface of the flap with Skin-Bond® (Smith & Nephew, United, Inc., Largo, FL). Initially, the template was adhered to the flap just before placing it in the chamber, but this step was later delayed until 1 hr after perfusion was started, or immediately before dosing.

2.9 Administration of Dose

Flaps either were not treated or received a 300-µL dose of either ethanol or HD (approximately 10 or 50 mg/mL) in ethanol. The amount of HD thus administered was either 3 or 15 mg. The dose was administered, from a glass syringe fitted with a blunt-tipped needle, along the axis of the flap from one end of the dosing template to the other.

2.10 Physiologic Parameters Monitored and Recorded

Several times were recorded, i.e., flap harvest time, perfusion start time, and dose application time. Physiologic parameters were recorded at either the first or second quarter-hour after perfusion was started, in 15-min intervals for the next hour, and in 30-min intervals for the next 8 hr. The total perfusion period was approximately 9 hr. At each recording the following procedures were followed.

- 1. At 1 min before the observation time, the stopcock next to the media waste receptacle was turned to stop the flow of used media from the flap.
- 2. An approximately 1-mL sample of media was collected from the sampling port between the arterial reservoir and the pump.

- 3. The following parameters were recorded:
 - a. Observation time,
 - b. Chamber air temperature and relative humidity,
 - c. Aterial reservoir media pH,
 - d. System pressure extremes over a 5-sec interval, and the integrated mean displayed on the Propag unit,
 - e. Media temperature at the in-line thermistor between the flap and the pressure transducer, displayed by the Propaq unit, and
 - f. Media flow, displayed by the flow base unit.
- 4. A 1-mL syringe was inserted into the stopcock next to the media waste receptacle, the stopcock was turned, an approximately 1-mL sample of used media was collected, and the stopcock turned back to its original, free-flow position,
- 5. The media samples were dispensed into labeled serum vials and stored for 30 min on a weigh boat in the hood. This period ensured hydrolysis of any HD that might have penetrated the skin or leaked through the dosing template seal and into the used media,
- 6. Media samples were removed from the hood at approximately 30 min after collection and analyzed for glucose and lactate concentration simultaneously. Results were printed on thermal paper and recorded in a spreadsheet with other physiologic data.

Environmental parameters (chamber temperature and humidity, and media pH and temperature) were monitored throughout each experiment to ensure optimal conditions for maintaining a healthy flap.

2.11 Study Termination and Tissue Collection

The pump was powered off at approximately 9 hr after the first observation time, and the volume of media in the waste receptacle measured in a graduated cylinder. If dosed with HD, the flap was decontaminated with 0.5 percent sodium hydroxide solution and then rinsed with distilled water dispensed from squeeze bottles. The cannulation needle hub was detached from the stopcock, the dosing template removed, and the flap weighed in a tared container. The flap was transected in the middle, and an approximately 2-mm thick section was cut from the middle of each half. The resulting flap disc was trimmed of underlying tissue and non-treatment area to leave only a section of skin that had been within the dosing template. The samples were placed into labeled vials containing 10 percent NBFS. Flap samples and skin samples collected during production of the flaps were paraffin embedded, sectioned at approximately 5 µm, mounted on glass slides, and stained with hematoxylin and eosin. The slides were shipped to Dr. Nancy Monteiro-Riviere at NCSU-CPTC for histopathologic examination. Dr. Monteiro-Riviere's reports identified some procedural shortfalls, such as insufficient flushing immediately after flap cannulation and excision as evidenced by red blood cells (RBCs) in sections.

2.12 Statistical Analyses

Data were recorded in a notebook spreadsheet program (Quattro Pro 6.0, Novell, Inc). Experiment information (dates, surgeons, flap treatment, etc.) was recorded in a separate spreadsheet and merged with the physiologic parameters data using the Statistical Analysis System (SAS Institute, Cary, NC).

2.12.1 Computations

Flow rates recorded at each observation period were corrected with the following factor determined for each flap:

$$\frac{V_w + 21mL}{V_{wait} + 540mL}$$

where

- V_w was the volume in the waste receptacle,
- 21 mL was the volume of the used media samples removed for glucose and lactate concentration assays,
- ullet V_{wait} was the volume of media perfused into the flap during the period between initiation of perfusion and the first quarter-hour on the clock, and
- 540 mL was the volume expected to be perfused at 1 mL/min for 9 hr.

Vascular resistance, VR (mm Hg•min/mL), was calculated at each observation time as the ratio of in-line mean pressure to the corrected flow. Baseline-normalized VR at a given time after dosing (no units) was calculated as VR at that time divided by VR immediately before dosing commenced.

Glucose utilization (GU, mg glucose/hr/g flap tissue), a general index of flap health normalized to the mass of the flap, was calculated as

$$GU = \frac{(G_a - G_u)F(60 \text{min/}hr)(1000 \text{mg/}g)}{W_f(1000 \text{mL/}L)}$$

where

- G_a and G_u were glucose concentrations (g/L) in the arterial media sample and the used media sample, respectively,
- F was the corrected mean media flow rate (mL/min), and
- $W_{\rm fi}$ was the initial (i.e., before perfusion) weight (g) of the flap.

The units of lactate produced per unit glucose consumed (no units) was an estimate of the anaerobic metabolism in the flap and was calculated as

$$M_{An} = \frac{L_u - L_a}{G_a - G_u}$$

where L and G were lactate and glucose concentrations (g/L), respectively, and the subscripts represented arterial and used media, respectively. The proximity of this variable to unity was used to evaluate flap health during the experiment.

Cumulative glucose utilization (CGU, mg glucose/g flap tissue), an index of the overall health of the flap at the end of an experiment, was the integral of GU over time using the trapezoidal rule:

$$CGU = \sum_{i=1}^{n} GU_{i}(t_{i} - t_{i-1})$$

where

GU_i was the glucose utilization over intervals i from 1 to n (typically n = 21), and t_{i-1} and t_i were the interval beginning and end, respectively (hr).

2.12.2 Plots

Three flap data sets were compiled and plotted by treatment group for four physiologic endpoints. The plots, included in Appendix B, present the data for four endpoints as means plus or minus two standard error of the means as functions of time relative to dosing. Thus, the time that perfusion was started was approximately t = -1 hr, and dose time was approximately t = 0 hr. In Figures 3 through 14, the values on the time axis are slightly offset for each treatment group to avoid overlap of standard error bars. Treatment groups are identified as "No Topical" for untreated flaps, "EtOH" for flaps dosed with 300 μ L of ethanol, "3 mg HD" for flaps dosed with 300 μ L of 10 mg/mL HD in ethanol, and "15 mg HD" for flaps dosed with 300 μ L of 50 mg/mL

HD in ethanol. In the figures that include data prior to dosing (Figures 3, 5, 7, 9, 11, and 13), data at 15 and 45 min prior to dosing are omitted to improve clarity of the plots.

2.12.3 Statistical Contrasts

Statistical contrasts were conducted with a two-way analysis of variance model at 0, 1, 2, 4, and 8 hr after dosing to test for the effects of topical applications (untreated, ethanol, 3 mg HD, and 15 mg HD) on each of four physiologic parameters. The incidence of histologic lesions were tabulated by treatment group and contrasted using Fisher's Exact Test. All tests were conducted at the 5 percent significance level.

3.0 Results

Room 9 of the MREF was halved with a dividing wall and double-action doors to separate the outer, surgical preparation area from the inner, surgical area. Both areas were coated with two layers of white epoxy paint. The preparation area was fitted with a scrub sink with knee-activated valves and a supply cabinet. The surgical area was fitted with a v-top operating table, small-animal gas anesthesia machine vented into an exhaust manifold, a portable surgery light, stools, instrument stands, electrocautery instrument, and scrub equipment. Surgical supplies were obtained to match as closely as possible that used during training at NCSU-CPTC. Surgical techniques were refined to emulate as closely as possible those practiced at NCSU-CPTC.

3.1 Phase I: Technology Transfer

Five MREF personnel traveled to NCSU-CPTC and received training in flap surgery and perfusion during the week of May 8, 1994. Although the facilities at the MREF were not complete at that time, the training received facilitated the ordering of equipment and the design of the perfusion chambers. Four technicians attended a second training session at NCSU-CPTC during the week of January 22, 1996.

A list of flaps and the treatment each received is presented in Table 3 (Appendix C). The first flap, numbered 2501 for continuity with NCSU-CPTC accounting, was raised at the MREF on January 30, 1995 and harvested February 1, 1995. Practice flaps were raised, harvested, and either not treated or dosed with 300 µL of ethanol. Mr. Jim Brooks, a perfusion technician at NCSU-CPTC, visited the MREF during the week of March 13, 1995 to observe and make suggestions on the surgery and perfusion procedures, and to examine the data obtained. Eight of the latest 10 flaps raised at the MREF were judged by Mr. Brooks as acceptable. His assessment concluded that the technology was successfully transferred, and Phase I was completed.

3.2 Phase II: Validation

Phase II commenced with the dosing of flaps 2523 and 2524 with HD in ethanol on March 22, 1995 and continued through flaps 2553 and 2554 on May 11, 1995. At the end of this set of experiments, all data and histology specimens were send to NCSU-CPTC for analysis. The NCSU-CPTC report recommended several procedural changes be instituted at Battelle. The data are presented here in sets relative to implementation of those changes.

3.2.1 Flaps (2501 - 2554) Produced Prior to the NCSU-CPTC Report

There were no apparent effects, in terms of either VR or baseline-normalized VR (Figures 3 and 4, respectively, and Table 4), among flaps treated with ethanol, flaps treated with 3 mg of HD in ethanol, and flaps treated with 15 mg of HD in ethanol. In all treatment groups, mean VR ranged from approximately 45 to 52 mm Hg•min/mL at t = 0 hr (i.e., immediately before dosing commenced at approximately 1 hr after the start of perfusion), increased to a range of approximately 51 to 59 mm Hg•min/mL by t = 4 hr, and ranged from approximately 46 to 57 mm Hg•min/mL by the end of the experiment (Figure 3). The slight increase in VR between t = 1 hr and t = 4 hr was more visually apparent in the baseline-normalized VR plot (Figure 4). In all dosed groups, GU increased for the first approximately 1.5 hr after perfusion was started (Figure 5). The flaps dosed with 15 mg of HD peaked at approximately 0.65 mg/hr/g; all other

groups peaked between approximately 0.9 and 1.0 mg/hr/g. HD significantly (p < 0.05) decreased GU over the course of the experiment for some flaps dosed with 15 mg of HD relative to the ethanol controls, but the GU levels for this treatment group were depressed even before dosing. Beginning at approximately t = 2 hr, flaps generally exhibited a steady decrease in metabolic function, independent of treatment, to mean GU levels between approximately 0.24 and 0.41 mg/hr/g. The effect of a 15 mg dose of HD was more visually apparent in the CGU plot (Figure 6) and statistically significant, but again, the pre-dose health status of these flaps may have confounded treatment effects. No HD-associated blisters were observed on the flaps at the end of the experiments.

These results were inconsistent with those previously published by NCSU-CPTC, which reported that topical application of HD stimulated an increase in flap VR by a factor of approximately 2.5 to 3.0 relative to ethanol controls¹⁰. Plotted data in the paper indicate that ethanol control flaps exhibit a steady metabolism for up to 8 hr after dosing, and that 3 mg HD-dosed flaps exhibit a sustained lower GU than ethanol controls. NCSU-CPTC observed a dose-response relationship between the concentration of HD applied, in the range of 1.25 to 10 mg/mL, and the incidence of frank blisters on flaps (verbal communications with Dr. Monteiro-Riviere).

On May 17, 1995, the entire MREF data set and histologic specimens were sent to NCSU-CPTC for evaluation. Work on Task 92-31 was suspended pending review of the results by NCSU-CPTC personnel. A paper (Appendix D), entitled "Report on Phase I and Phase II of Battelle IPPSF Perfusion", was submitted to Battelle by NCSU-CPTC on August 4, 1995.

Based on Mr. Brooks' visit and histologic evidence of residual RBCs after the flaps were flushed, NCSU-CPTC personnel selected for analysis 22 of the 54 flap experiments performed at the MREF. Of the 22 flaps selected, five were untreated, eight were dosed with ethanol, four were dosed with 3 mg of HD, and five were dosed with 15 mg of HD. The paper reported that:

- The coefficients of variation associated with physiologic parameters from MREF experiments were larger than those of the NCSU-CPTC counterparts, and
- The metabolic rate in MREF flaps began to decline between 3 and 4 hr after dosing as opposed to metabolic homeostasis in flaps prepared at NCSU-CPTC.

The report recommended that Battelle:

- Minimize the number of surgeons being trained to raise and harvest the flaps, thus reducing variability and time in surgery,
- Increase the volume of heparinized normal saline used to flush the flaps,
- · Check the media for correct osmolality,
- · Investigate means of ensuring proper perfusate flow rates, and
- Wait to attach the dosing template until after the 1-hr acclimation period.

Changes were implemented in the MREF procedures to accommodate these recommendations. There was also some speculation that the strain of swine may have had some bearing on the quality of flaps produced. All subsequent swine were obtained from Isler Genetics.

3.2.2 Flaps (2555 - 2598) Produced After the NCSU-CPTC Report

The focus of the next session of flap production and testing, from August 25 to November 25, 1996, was to:

- Obtain healthy flaps by ensuring consistent surgical techniques, and flushing the harvested flaps until the exudate became clear (i.e., free of RBCs), and then
- Perform experiments that compared the effects of ethanol versus HD in ethanol (3 mg) applied topically to flaps.

Results of this set of experiments, involving 38 successful flaps out of 44 attempts, are summarized in Figures 7 through 10 and in Table 5. There were no significant HD-related effects observed in this set of flaps. Mean VR ranged from approximately 39 to 47 mm Hg•min/mL at t = 0 hr and increased only slightly, to between 43 and 51 mm Hg•min/mL, at t > 4 hr. There were no treatment-related differences in VR among the groups at any time in the experiments. Figure 8 shows that flaps dosed with 3 mg of HD exhibited a rapid, approximately 30 percent increase in baseline-normalized VR over 2 hr < t < 4.5 hr; nevertheless, GU plots (Figure 9) indicated mean control levels at t = 0 hr between 0.57 and 0.70 mg/hr/g, similar to the level for flaps dosed with 15 mg of HD in the initial set of flaps analyzed. Mean GU for all groups was stable for approximately 2 hr after dosing and then declined to a range from 0.35 to 0.40 mg/hr/g at the end of the experiment. Baseline-normalized VR and GU were significantly (p < 0.05) depressed in

ethanol-treated flaps relative to untreated flaps. CGU plots confirmed that there were no significant differences among the treatment groups in terms of metabolic function.

3.2.3 Experiments Performed with Media Made with a Different Bovine Serum Albumin, Flaps 2599 - 2640

Further discussion with NCSU-CPTC personnel disclosed that they had stopped obtaining bovine serum albumin (BSA) from Sigma Chemical Co. The source of BSA was now Mallinckrodt Chemical, Inc. (Paris, KY). A third set of experiments, including flaps 2599 through 2640, was performed from November 19, 1995 to March 7, 1996. This was a final attempt to validate the MREF flap production procedures by evaluating the effects of HD on the model. Flaps were either left untreated or dosed with either ethanol or 3 mg of HD in ethanol.

The results of this work are summarized in Figures 11 through 14 and in Table 6. In all treatment groups, mean VR was between approximately 37 and 43 mm Hg•min/mL at t = 0 hr and increased to a range of approximately 55 to 65 mm Hg•min/mL at t > 6 hr (Figure 11). When normalized to baseline levels (Figure 12), VR for this set of flaps increased by a range of 40 to 80 percent over the course of the experiment, but there was no apparent effect on flap vasculature associated with dosing either ethanol or HD in ethanol. The general increase in VR was likely due to using Mallinckrodt BSA in the media, as flaps in the second set of experiments, i.e., those perfused with media made with Sigma BSA, exhibited increases in mean VR of no more than 30 percent over baseline values.

Treatment group mean GU ranged from approximately 0.66 to 0.84 mg/hr/g at t = 0 hr, and remained stable until t = 2 hr (Figure 13). Thereafter, metabolism started declining until approximately t = 7 hr, when it leveled off between 0.45 and 0.55 mg/hr/g. The flaps dosed with 3 mg of HD appeared metabolically stimulated for approximately 1.5 hr after dosing, (p < 0.05 relative to ethanol controls) in contrast to what was observed in the first set of flaps dosed with 15 mg of HD. CGU failed to discriminate among the treatments, as mean CGU levels were within approximately 0.5 mg/g of each other throughout the experiment, and end-of-experiment group mean CGU levels ranged from approximately 4.4 to 4.9 mg/g.

3.2.4 Histopathology

The effect of BSA source was also compared by examining histologic lesion incidence rates. Table 7 presents lesion incidence rates for normal pig skin samples collected during flap raising, untreated flaps, and flaps dosed with either ethanol or 3 mg of HD, tabulated by BSA source. Table 8 presents the same data as incidence ratios, with Fisher's Exact Test results for selected intergroup comparisons.

No lesions were observed in any normal pig skin samples. Epidermal-dermal separation was observed in 80 and 58 percent of the untreated Sigma and Mallinckrodt BSA flaps, respectively. Surprisingly, this endpoint for dermatotoxicity was reduced when either ethanol or HD in ethanol was applied to Sigma BSA flaps (29 percent), but remained relatively unchanged for Mallinckrodt BSA flaps (61 and 71 percent), respectively. The difference between untreated and ethanol treated flaps bordered on being statistically significant (p = 0.058) for flaps perfused with the Sigma BSA media, but not with media containing the Mallinckrodt BSA (p = 1.000). Also, there was no effect of including HD in the ethanol for this parameter with either BSA source (p = 1.000).

No flap treatment or BSA source-related effects were apparent for either intra- or intercellular edema (p = 1.000). However, the incidence of dark basal cells, another index of HD toxicity, was higher in ethanol-treated Mallinckrodt flaps (33 percent) than untreated controls (8 percent, p = 0.193) and increased to 50 percent with HD treatment (p = 0.664, relative to ethanol controls). There were apparently no similar treatment effects in the Sigma BSA flaps. None of the differences associated with flap treatment were considered statistically significant for either edema or dark basal cell incidence rates.

3.2.5 Gross Lesions

The incidence of frank blisters by flap set and treatment group is presented in Table 9. Frank blisters were not observed on any of the flaps in the first set, i.e., flaps harvested from Shady Side Farms swine and perfused with media made with Sigma BSA. In the second set of

flaps (Isler Genetics swine, Sigma BSA in the media), no blisters were observed on either untreated flaps or flaps dosed with 3 mg of HD in ethanol, but in the ethanol control group, 2 of 12 flaps exhibited blisters. In the third set of flaps (Isler Genetics swine, Mallinckrodt BSA in the media), blisters were observed in approximately one-third of the flaps regardless of treatment. NCSU-CPTC personnel indicated that the increased rate of blister formation was likely due to the general increase in VR associated with using media made with Mallinckrodt BSA. Fisher's Exact Tests for the effect of BSA indicated significant (p < 0.05) increases in blister rates among untreated flaps and HD-treated flaps perfused with Mallinckrodt BSA media, but not for ethanol-treated flaps. None of the Fisher's Exact Test results for topical treatment effects was statistically significant (p > 0.05). The data were presented to USAMRICD personnel at the semi-annual technical review in April 1996, and the decision was made to stop flap production.

3.3 Phase III, Decision Tree Network Module Development

The third phase of this task was not initiated due to the absence of HD treatment-related effects in the earlier phases.

3.4 Phase IV, Test Material Evaluation

The fourth phase of this task was not initiated due to the absence of HD treatment-related effects in the earlier phases.

4.0 Conclusions

The IPPSF laboratory established at NCSU-CPTC was duplicated at the MREF as closely as possible, with slight modifications in the design of the perfusion chamber to accommodate dosing CSM in a fume hood, and modernization of equipment used to monitor experimental parameters. Duplication of methods and SOPs, two training sessions of Battelle personnel at

NCSU-CPTC, and a visit to Battelle by a perfusion technician from NCSU-CPTC were essential parts of the transfer of techniques for raising, harvesting, and perfusing flaps.

Battelle completed Phase I (Technology Transfer) with the production of 22 flaps that were deemed acceptable by NCSU-CPTC personnel. Variability in Battelle data was somewhat higher than that in similar data from NCSU-CPTC, and flaps obtained at the MREF generally exhibited a gradual decline in metabolism not seen in NCSU-CPTC flaps. There were no conclusive treatment-related effects observed in flaps, either in terms of VR, GU, CGU, or the incidence of histologic or grossly observable lesions.

Subsequent to finding a different source of SPF swine and implementing several minor modifications in technique recommended by NCSU-CPTC, Battelle produced 43 flaps and either left them untreated or dosed them with either ethanol or 3 mg of HD in ethanol. Again, there were no HD-related effect observed in this set of flaps. Ethanol appeared to depress baseline-normalized VR and GU relative to no treatment, and seemed to have a more profound effect on the flaps than did HD. The persistent, gradual decline in flap metabolism stimulated a closer investigation of the perfusion media.

A final set of 42 flaps was produced and perfused with media made with the new source of BSA. Treatment groups were the same as in the second set of flaps, i.e., flaps either remained untreated or were dosed with either ethanol or 3 mg of HD in ethanol. Increases in three endpoints were observed relative to previous flaps: VR at t > 2 hr after dosing was increased, and the incidence of epidermal-dermal separation and the incidence of frank blisters increased. These changes occurred across all groups, however, without any association with application of either ethanol or HD. HD appeared to temporarily stimulate flap metabolism relative to ethanol controls. There was a weak association (p = 0.058) of an increase in the incidence of dark basal cells with application of ethanol in this final set of flaps.

Attempts to refine the techniques, including

- Limiting the number of surgeons for training and flap production in order to reduce both stress on the anesthetized swine and variability among flaps,
- Increasing the volume of media used to flush RBCs from the harvested flap,
- · Checking each batch of perfusion media with a micro/osmometer, and

• Using a different supplier of swine,

had no effect on the physiologic responses of flaps to HD application. Under conditions at Battelle, the IPPSF model was not as dynamic in its response to HD as that reported by NCSU-CPTC.

The IPPSF model was transferred to Battelle, but an experimental paradigm for testing the dermatotoxic effects of HD applied topically could not be developed. NCSU-CPTC has published papers demonstrating flap homeostasis for up to 9 hr after initiating perfusion, and they have used this model primarily to measure transdermal penetration of xenobiotics. The IPPSF may be much better utilized in such experiments measuring or comparing skin penetration by xenobiotics.

5.0 Record Archives

Records pertaining to the conduct of Task 92-31 are contained in Battelle laboratory three-ring binders and record books and are archived at the MREF. All original data will be maintained at Battelle or forwarded to the U.S. Army following acceptance of the final report.

6.0 Acknowledgments

The name, role in the study, and highest academic degree of each of the principal contributors in this study are:

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MREF Manager

D.V.M., M.S.

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APPENDIX A

MREF Protocol 97

Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

> Study Performed by Battelle Memorial Institute 505 King Avenue Columbus, Ohio 43201-2693

- 1. <u>Principal Investigator and Manager</u>: David W. Hobson, Ph.D., D.A.B.T., Medical Research and Evaluation Facility (MREF)
- 2. Study Director: Thomas H. Snider, B.S., D.A.B.T.
- 3. Study Veterinarians: Allen G. Manus, D.V.M. Frances M. Reid, D.V.M., M.S., D.A.B.V.T., D.A.B.T.
- 4. Sponsor: U.S. Army Medical Research and Development Command (USAMRDC)
- 5. Sponsor Monitor: LTC Don W. Korte, Jr., Ph.D., U.S. Army Medical Research Institute of Chemical Defense (USAMRICD)
- 6. Background: Researchers at North Carolina State University (NCSU), under contract with USAMRDC, have developed an isolated perfused porcine skin flap (IPPSF) model for studying vesicant injury¹. The IPPSF is produced by resecting an elliptical area of ventral abdominal skin on a female weanling swine and suturing together the lateral and distal edges to form a single-pedicle, tubular flap with circulation intact. The injured tissue is allowed to heal for two days, and the flap is excised and placed into a perfusion chamber. This technique provides an ex vivo skin model with normal anatomical structure and microcirculation which produces microvesication upon exposure to sulfur mustard (HD). This task will transfer this technology to the MREF and further develop it as an advanced screening module within a Decision Tree Network (DTN) for evaluating systemic prophylactic and therapeutic treatments (SP&TTs) against topical exposures to HD.

Riviere, J.E. and Monteiro-Riviere, N.A. (1991) The isolated perfused porcine skin flap as an <u>in vitro</u> model for percutaneous absorption and cutaneous toxicology. <u>Crit. Rev. Toxicol.</u> 21:329-44.

- 7. Objectives: After successful transfer of technology from NCSU to MREF (Phase I), the development of the IPPSF into a screening module will be accomplished in three subsequent phases with these specific objectives:
 - A. Phase II perform a set of routine experiments with 30 IPPSFs (15 swine) at the MREF that produces results statistically equivalent to previous results obtained at NCSU;
 - B. Phase III use 30 IPPSFs (15 swine) to develop an experimental procedure that can be used to effectively discriminate among candidate SP&TTs in their ability to protect against HD-induced injury; and
 - C. Phase IV evaluate and rank order up to seven SP&TTs, to be determined by USAMRICD, with 20 IPPSFs each (using a total of 70 swine in this phase).
- 8. Experimental Design: Methods for the surgical production and harvesting of the IPPSF, and for set up, preparation, maintenance and cleaning of the IPPSF perfusion chamber, are detailed in MREF SOPs. This protocol includes procedures for administration of a SP&TT, topical exposure of IPPSFs to HD, and for quantifying the irritation response with these and other possible endpoints:
 - dextrose utilization and lactate production,
 - vascular resistance,
 - gross vesication, and
 - histologic evidence of microvesicles.

A dilute solution of HD on a vehicle solvent (nominally ethanol) is applied to the IPPSF to produce a diffuse, moderate irritation response. The focal, severe irritation produced by applying a droplet of neat HD to the IPPSF would likely be less responsive to therapeutic measures. Thus, candidate SP&TTs that are effective against milder challenges would fail such a screen and go unidentified. In order to improve test sensitivity to SP&TT efficacy, a dilute HD solution is applied. In an alternative model, an IPPSF is exposed to an environment of HD vapors.

This protocol includes methods for three types of studies, i.e., (1) a validation study to evaluate the quality of IPPSF technology transfer to MREF, (2) pilot studies to investigate test conditions for evaluating SP&TTs, and (3) efficacy evaluations of candidate SP&TTs. Due to the expense of facilities required to sustain each IPPSF, a limited number of IPPSFs are prepared for dosing on a given day. Treatment groups

nominally consist of 15 (validation) or 10 (efficacy evaluations) replicate IPPSFs each, randomized across treatment groups to reduce the effects of workers gaining technical proficiency and other trends associated with minor enhancements in the procedure.

In the validation study, a standard solution of HD in vehicle is applied to an IPPSF, and perfusate is sampled at specific exposure times and analyzed for dextrose utilization and lactate production. Vascular resistance is continuously monitored before dosing and for up to 8 hr after dosing. Dextrose utilization, lactate production, and vascular resistance are expressed as percentages of baseline (predose) levels. At 8 hr after dosing, the IPPSF is grossly examined, decontaminated, removed from the perfusion chamber, and sampled for histologic examination.

In the SP&TT efficacy tests, a candidate SP&TT material is administered in the perfusate at a standard interval either before or after the exposure of the IPPSF surface to HD. Dextrose utilization, lactate production, and vascular resistance are measured in the naive IPPSF, after HD application, and again after SP&TT treatment. The values are normalized to naive levels.

- A. Test Systems Specific pathogen-free, weanling female swine were specified for use in this study by the NCSU investigators, who have previously demonstrated that porcine skin parallels human skin in response to HD and other irritants. Each swine provides two areas for production and harvesting of an IPPSF, of which one IPPSF can serve as the control for the contralateral, test IPPSF. Donor swine may be returned to their source in a state of full health after these procedures.
 - (1) Animals SPF Yorkshire/Hampshire cross female swine; Supplier: Shady Side Farm, Powell, OH
 - (2) Initial Weight 18 to 30 kg
 - (3) Quarantine Swine are held in isolation and observed for clinical illness for at least 7 days prior to study initiation. Quarantine may be performed at Battelle's King Avenue animal facility or at the MREF.
 - (4) Acclimation All swine are held at the MREF at least 24 hr prior to study initiation.

- (5) Selection Swine that are in good physical condition after a minimum 7-day quarantine period become candidate donors. Individuals are then selected for study on the basis of health, proper weight, and condition of inguinal skin. The swine are randomly assigned to weight-homogenized treatment groups for use on study in a randomized sequence.
- (6) Animal Identification Ear tag or tattoo; positive identification is required for each swine upon admission to quarantine. At a minimum, cage cards identify animal number, sex, supplier, and date of receipt for each swine.
- (7) Housing Swine are housed individually in stainless steel cages equipped with automatic watering systems.
- (8) Lighting Fluorescent lighting, light/dark cycle is 12 hr each per day.
- (9) Temperature Maintained at 21 C (± 3 C).
- (10) Humidity Maintained at 50 percent (\pm 10 percent).
- (11) Diet Purina Certified Swine Feed is available at all times. No contaminants are known to be present in the feed which would interfere with or affect the results of the study.
- (12) Water Supply Water is supplied from the public water system and given <u>ad</u> <u>libitum</u>. No contaminants are known to be present in the water which would affect the results of the study.
- (13) Laboratory Animal Welfare Practices Battelle's Animal Resources Facilities have been registered with the U.S. Department of Agriculture (USDA) as a research facility (Number 31-21) since August 14, 1967, and are periodically inspected in accordance with the provisions of the Federal Animal Welfare Act. In addition, animals for use in research are obtained only from laboratory animal suppliers duly licensed by the USDA. Battelle's statement of assurance regarding the Department of Health and Human Services policy on humane care of laboratory animals was accepted by the Office of Protection from Research Risks, National Institutes of Health (NIH), on August 27, 1973. Animals at Battelle are cared for in accordance with the guidelines set forth in the "Guide for the Care and Use of Laboratory Animals" (NIH Publication Number 85-23) and/or in the regulations and

standards as promulgated by the Agricultural Research Service, USDA, pursuant to the Laboratory Animals Welfare Act of August 24, 1966, as amended.

- (14) Accreditation On January 31, 1978, Battelle Memorial Institute received full accreditation of its animal-care program and facilities from the American Association for Accreditation of Laboratory Animal Care (AAALAC). Battelle's full accreditation status has been renewed after every inspection since the original accreditation. The MREF is a part of the facilities granted full accreditation.
- (15) Animal Care During Surgery Each swine is anesthetized and taken to a surgery suite for IPSSF production, and again two days later for IPPSF harvesting. Health status is monitored for heart rate, temperature, and respiration. After each procedure, the swine is returned to its cage for recovery from anesthesia.

B. Experimental Overview

- (1) Outline of Studies Until the test procedure is performed routinely at the MREF, only one swine will be used per day. The following study design implies a single swine per day use rate, but this rate may change to two or more swine per day as surgical teams become more proficient.
 - (a) Validation Study (Phase II) The validation study is conducted over 15 replicate days of two IPPSFs per day, for a total of 30 IPPSFs. Each swine will contribute two IPPSFs, of which one will be randomly selected to serve as a vehicle control, and the other will be dosed with an equivalent volume of HD in vehicle. Data will be paired by swine to determine the effects of HD on IPPSF physiology. If one of the IPPSFs is unusable, then the experiment will proceed without that IPPSF. The MREF model will be considered valid by showing that the MREF results are consistent with those previously obtained at NCSU under similar test conditions.

- (b) DTN Test Module Development (Phase III) This phase is conducted with 30 IPPSFs and involves development of the test conditions necessary to screen systemic prophylactic and therapeutic treatments against HD injury. Ten IPPSFs are used in each of the following investigations to determine test conditions:
 - (i) HD Phase Study The criteria for selection of a HD phase (liquid or vapor) for exposure is based on whether microvesicles are produced, and the degree of within-group variability in IPPSF physiologic responses. The phase that produces microvesicles more consistently and renders physiologic changes with less variability will be selected.
 - (ii) HD Dose Level (Liquid) or Exposure Time (Vapor) Selection The optimal dose level or exposure time (depending on the outcome of the HD phase study) is an exposure that produces a physiologic and/or histopathologic response to a degree that might be ameliorated by a successful SP&TT. Thus, producing a moderate or marked response is the objective.
 - (iii) SP&TT Timing Study An optimal time relative to HD exposure for treatment with SP&TTs is determined. Initial pretreatment or posttreatment times are based on the biochemical mechanisms responsible for the hypothetical efficacy of an individual or class of SP&TTs. Selection of an optimal treatment time relative to dosing is based on the performance of a sponsor-identified SP&TT administered at various times either before or after the HD exposure.
- (c) SP&TT Efficacy Tests (Phase IV) Each SP&TT candidate is tested over 10 replicate days of two IPPSFs per day, for a total of 10 IPPSFs treated with the candidate SP&TT and 10 positive control (or standard) IPPSFs. At the discretion of the Study Director, fewer than 10 replicates may be performed if the data on hand are sufficient to statistically discriminate among the candidates. SP&TTs are administered intravascularly in the perfusate, either before or after the HD challenge.

(2) Definition of Treatment Groups

- (a) Validation Study (Phase II) On each of 15 replicate days, one IPPSF is treated with a dilute solution of HD in vehicle (nominally ethanol), and the other is treated with an identical volume of vehicle.
- (b) DTN Test Module Development (Phase III)
 - (i) HD Phase Study On each of five replicate days in the HD phase study, one IPPSF is dosed with a standard volume of HD/solvent, and the other is subjected to an atmosphere of vaporous HD.
 - (ii) HD Dose Level (Liquid) or Exposure Time (Vapor) Selection In this study, two IPPSFs are identically exposed to HD at increasing levels across the five test days. If liquid exposures are preferred, then the concentration is increased in a constant volume. If vaporous HD exposures are preferred, then the exposure times are increased.
 - (iii) SP&TT Timing Study Treatment times relative to HD exposure are selected and randomized for testing. Nominally, these are 60 and 30 min before dosing and 5, 30, and 60 min after dosing. Other treatment times may be substituted for these at the discretion of the study director after consultation with the sponsor. On each of five replicate test days, a sponsor-identified SP&TT is administered into the perfusate solution at two of the predetermined treatment times. The treatment times are determined by a Latin square so that the IPPSFs used on a given test day are not treated at the same time, but each of the five treatment times will be represented by two replicates at the end of the study.
- (c) SP&TT Efficacy Tests (Phase IV) On each replicate day, one IPPSF is used as a no-SP&TT, positive (HD/vehicle dosed) control, and the other is treated with a candidate SP&TT followed by (or preceded by, as the case may be) a dilute solution of HD in vehicle. The positive control is included as a swine-specific check on process quality control. At the discretion of the study director after consultation with the

sponsor, this design may be modified to treat the positive control IPPSF with a standard SP&TT when

- (i) such a standard SP&TT is identified by the sponsor and
- (ii) sufficient data are on hand to use IPPSFs treated with the standard SP&TT as process controls.

Thereafter, statistical comparisons will be made between the candidate and standard SP&TTs.

C. Test Articles

(1) Systemic Prophylaxis and Therapeutic Treatments - SP&TTs are supplied by the sponsor. It is the responsibility of the sponsor to ensure that appropriate identification (batch number, lot number, physical state, etc.), expiration date (if available), safety and storage data are supplied for each candidate SP&TT received by the MREF.

(2) Irritant

- (a) HD is supplied by USAMRICD. Purity, appropriate identification (batch number, lot number, state), and stability data are supplied by USAMRICD. Purity and stability are confirmed periodically by Battelle.
- (b) Surety, security, and safety procedures for the use of CSM are thoroughly outlined in facility plans, in personnel requirements for qualifications to work with agents, and in agent storage and use standard operating procedures. All safety procedures given in Battelle SOP MREF I-002, entitled "Standard Operating Procedure (SOP) for the Storage, Dilution, and Transfer of GA, GB, GD, TGD, VX, HD, HD/L, and L When CSM Concentration/Quantity is Greater Than Exempt Levels", and Battelle SOP MREF II-010, entitled "Standard Operating Procedure (SOP) for the Application of HD, L, and HL Chemical Surety Materiel to the Isolated Perfused Porcine Skin Flap", are observed during handling and dosing of HD.

- D. Producing and Harvesting the IPPSF Procedures for administering and maintaining anesthesia, and for the surgical production of and harvesting an IPPSF are presented in Battelle SOP MREF VII-023, entitled "Standard Operating Procedure (SOP) for the Surgical Preparation of the Isolated Perfused Porcine Skin Flap". A brief description of the procedure follows.
 - (1) Anesthesia The swine is premedicated with 1.5 mg/kg intramuscularly (i.m.) of atropine sulfate. Anesthesia is induced with ketamine hydrochloride (11 mg/kg i.m.) and xylazine hydrochloride (1.5 mg/kg i.m.). The swine is placed on a surgical table on its dorsum, and an endotracheal tube is inserted. Anesthesia is maintained via halothane inhalation (1 to 1.5 percent). These anesthetics may be modified as directed by NCSU consultants.
 - IPPSF Production The swine is prepared for aseptic surgery in the caudal (2) abdominal and inguinal regions. A sterile marking pen is used to place reference marks on the skin in the caudolateral epigastric region. Skin incisions are made around the caudal superficial epigastric artery within a 4- by 12-cm rectangle. Major superficial vessels are ligated and divided, and minor vessels are cauterized. Subcutaneous tissue is dissected away from the skin. Dissection continues until the only tissue connecting the flap to the donor are the caudal superficial epigastric artery, paired venae comitantes, and immediate connective tissue. Starting at the caudal end, the sides of the flap are apposed and sewn together. Fat is trimmed away from the flap edges, if necessary. Three tissue layers are separately apposed and sewn together in sequence: deep subcutaneous tissues, superficial subcutaneous tissues, and skin incision edges. The wound site and flap are bandaged, and the flap is ligated to the cranial end of the wound to immobilize it. The swine is allowed to recover from anesthesia and returned to individual housing.
 - (3) IPPSF Harvesting Two days after IPPSF production, the swine is anesthetized and prepared for aseptic surgery as before. Care is taken to ensure that scrub solution does not contact the flap. A 3 mL volume of 1,000 USP units/mL of heparin is administered in a marginal ear vein. All sutures are removed from the base of the flap, and the flap is lifted slightly away from the donor surface with vessels intact. The superficial epigastric artery is cannulated, and the donor side is sutured closed. Other connecting tissues are severed, and the flap is perfused with a flush solution and transferred to an assistant, who closes the flap with suture. The donor's

wound is closed, and the swine is allowed to recover from anesthesia and returned to individual housing. Alternatively, the swine may be anesthetized with Beuthanasia solution. Remaining sutures from surviving swine are removed at 7 to 10 days after the IPPSF production stage.

- E. Preparation of IPPSF for Testing After excision from the swine, cannulation, and commencement of perfusion, the IPPSF is allowed to reach a steady state over an acclimation period of nominally 1 hr in the perfusion chamber.
- F. Baseline Values After acclimation, baseline data for the appropriate endpoints, such as vascular resistance, dextrose utilization, and lactate production are collected.
- G. Systemic Prophylactic Treatments SP&TTs are administered at a test-specified time relative to exposure to dilute HD. Treatment schedules may be changed by the study director after consultation and agreement by the sponsor. SP&TTs may be administered to the IPPSF either topically or in the perfusate according to standard methods established at the MREF.

H. Application of HD to IPPSF

- (1) Exposures of HD are made in fume hoods approved for use with chemical surety materiel. During dosing and throughout the exposure period for each test, the IPPSF is positioned inside the perfusion chamber in a hood.
- (2) Applications of HD are made at test-specified times and consist of a constant volume of application. The challenge dose concentration and volume for a liquid exposure may be changed at the discretion of the study director after consultation and agreement by the sponsor. All safety procedures given in Battelle SOP MREF I-002 are observed during handling and dosing of HD. Instructions for applying a solution of HD onto an IPPSF and for exposing an IPPSF to a HD vapor environment are specified in Battelle SOP MREF II-010.

A 10- μ L (or other, sponsor-specified) volume of HD/vehicle is dispensed from a syringe at the distal tip of the IPPSF. A Hamilton 7001N or other suitable syringe with a sharp-tip, positive displacement needle may be used to provide a point source, air-dropped delivery. A larger syringe may be used in a calibrated micrometer-driven dosing device (MDDD) to administer the

agent solution. If a droplet of HD/vehicle remains on the end of the needle, the needle may be brought down close to the skin surface so as to "wick" off the droplet.

- I. Physiologic Monitoring Immediately after agent dosing, the perfusion chamber is sealed, and the perfusion period begins. The perfusion chamber temperature and humidity are monitored and regulated. Physiologic processes such as efferent perfusate dextrose and lactate concentrations, afferent perfusion pressure, and perfusate flow rate are periodically monitored.
- J. Study-Specific Decontamination At the end of the experiment, the IPPSF is decontaminated to chemically destroy any residual HD. A 4- by 4-inch gauze pad is grasped with tongs, soaked in a solution of 0.5 percent sodium hypochlorite (NaOCl), and gently wiped over the IPPSF epidermal surface. Likewise, two other gauze pads are sequentially soaked in distilled water and wiped over the IPPSF to rinse off any residual bleach.

K. Pathology

- (1) Gross Lesion Evaluation The IPPSF is visually examined for development of skin color or texture changes, edema, and blisters.
 - (a) Skin color or texture changes are described using a consistent set of descriptors.
 - (b) Edema is scored according to the following:

No edema	0
Very slight edema (barely perceptible)	1
Slight edema (edges of the lesion area are	
well-defined by definite raising)	2
Moderate edema (raised approximately	
one millimeter)	3
Severe edema (raised more than one millimeter	
and extending beyond the area of exposure)	4

(c) Blisters are described using a consistent set of descriptors according to their pattern, area of skin involvement, and general degree of elevation above the peripheral normal skin.

- (2) Pathology The afferent and efferent cannulae are removed from the IPPSF, which is prepared for study-specific histologic processing. Samples of the IPPSF are collected and placed into a solution of the appropriate fixative. Each specimen is identified by placing it into a labeled jar or cassette. Specimens are identified by task number, charge account number, study director, date and time of tissue harvesting, and swine number. A warning label stating that the skin samples were exposed to HD is affixed to the outside of each container and to the outside of the box used for transportation. All samples are retained at the MREF for 24 hr before being transported to another facility for histologic processing. After fixation, they are processed for routine hematoxylin and eosin staining and histopathologic evaluation by light microscopy. Each specimen is evaluated, as a minimum, for microvesication.
- L. General Decontamination and Perfusion Chamber Cleaning The IPPSF support table and all other surfaces in the perfusion chamber that were potentially in direct contact with HD are decontaminated with a 5 percent solution of NaOCl. Other details regarding cleaning of perfusate containers, tubing and related equipment are given in Battelle SOP MREF II-011, entitled "Standard Operating Procedure (SOP) for Cleaning the IPPSF Perfusion Chamber and Apparatus".

M. Statistical Methods

- (1) Quality Control Standard quality control methods are employed to establish a range of tolerable control values for one or more of the physiologic parameters at naive, pretreatment readings. Initially, the control data are checked against results from NCSU experiments, but after completion of the Validation Phase, an MREF data base will also be compiled for quality control. Control charts are maintained for positive control (no SP&TT) and for a standard SP&TT, if identified.
- (2) Statistics Continuous (quantitative) data are tabulated within treatment groups and summarized using univariate statistics. Histopathologic data are tabulated and summarized as incidence frequencies. Statistical comparisons are performed, depending on the type of data and the objective for each phase of the task.

- (a) Validation Study (Phase II) Differences between results from vehicle controls and HD/vehicle-dosed IPPSFs are determined for each swine. A paired Student's t-test is performed on each physiologic endpoint. If more than five swine produce only one useable IPPSF, then an unpaired Student's t-test is also performed, using raw data without calculating differences for each pair of IPPSFs.
- (b) DTN Test Module Development (Phase III)
 - (i) HD Phase Study The variances from both groups are subjected to an F test to determine whether they are statistically different for each parametric endpoint. A nonparametric analysis of variance (ANOVA) test determines whether the HD phases produce significantly different incidence frequencies of histopathologic findings.
 - (ii) HD Dose Level (Liquid) or Exposure Time (Vapor) Selection Data are plotted as a function of the degree of HD exposure, whether it be HD concentration or exposure period. An exposure level is selected for screening SP&TTs that optimizes the chances of detecting an ameliorating effect, that is, one that is on a linear portion of the dose-response curve for each endpoint. A probit analysis is performed if the amount of data exists to warrant one.
 - (iii) SP&TT Timing Study ANOVA is performed on parametric data to determine whether there are any significant trends associated with SP&TT treatment time relative to HD exposure.

 Nonparametric ANOVA is performed to detect differences among groups for quantal endpoints.
- (c) SP&TT Efficacy Tests (Phase IV) Statistical tests are performed to determine whether normalizing candidate SP&TT data to the control (or standard) IPPSF data reduces the variability within treatment groups. The data, whether raw or normalized, are contrasted by ANOVA and subsequent Tukey tests to determine significant differences between each combination pair of candidate SP&TTs. The candidate SP&TTs are rank ordered.

9. Records to be Maintained:

- A. HD and SP&TT inventory, specifications, and usage,
- B. Dosage preparation and administration,
- C. Animal receipt and quarantine records,
- D. Animal data from all tests performed, and
- E. Decontamination results and disposal records

10. Reports:

A letter report is submitted for each phase of work in this task. A draft final report is prepared and submitted within 30 days after completion of the task. It includes at least the following:

- A. Signature page for key study individuals and their responsibilities,
- B. Experimental design,
- C. Ex vivo test data,
- D. CSM Application procedures,
- E. Tabulation of response data for each exposure, or for each SP&TT tested,
- F. Statistical methodology used, and
- G. Discussion.

11. Approval Signatures:

Thomas A Sinder		
Thomas H. Snider, B.S., D.A.B.T.		Date
Study Director	.*	

Tavidlo. Holson	_/2
David W. Hobson, Ph.D., D.A.B.T.	Da
Principal Investigator and Manager	
Medical Research and Evaluation Facility	

David State	_12/17/93
David Stitcher	Date '
Certified Industrial Hygienist	
Medical Research and Evaluation Facility	

allan G. Manus	12/17/93
Allen G. Manus, D.V.M.	Date/ /
Study Veterinarian	

for LTC Don W. Korte, Jr., Ph.D.
USAMRICD COR

 $\frac{2//9/95}{\text{Date}}$

MREF Protocol 97 Medical Research and Evaluation Facility February 18, 1994 Page 16

Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

MREF Protocol 97 Amendment No. 1

Change: On page 9, replace Section 8.D.(7) with the following (additions are in bold type):

IPPSF Harvesting - Two days after IPPSF production, the swine is anesthetized and prepared for aseptic surgery as before. Care is taken to ensure that scrub solution does not contact the flap. A 3 mL volume of 1,000 USP units/mL of heparin is administered in a marginal ear vein. All sutures are removed from the base of the flap, and the flap is lifted slightly away from the donor surface with vessels intact. The superficial epigastric artery is cannulated, and the donor side is sutured closed. Other connecting tissues are severed, and the flap is perfused with a flush solution and transferred to an assistant, who closes the flap with suture. The donor's wound is closed, and the swine is allowed to recover from anesthesia and returned to individual housing. The condition of each swine is assessed by a Battelle staff veterinarian following collection of skin flaps, and if the animal is debilitated, it is euthanatized with Beuthanasia or other approved euthanasia solution and the carcass incinerated. If the swine is in good condition, then it is donated or sold to a local pork producer. Remaining sutures from surviving swine are removed at 7 to 10 days after the IPPSF production stage.

Reason:

The only treatment these animals will have undergone is anesthesia with associated non-invasive surgery to produce and then excise skin flaps. The withdrawal times (i.e., the time after treatment with a drug that animals must be held prior to sending to slaughter) for the anesthetic/analgesic agents that are to be administered is relatively short, only a week or so. The pigs used in this study will be much lighter than the normal market weight of approximately 240 pounds, and therefore will require feeding for a prolonged period before being sent to a sale.

Impact: This change will have no impact on the study.

Thomas H. Snider, B.S., D.A.B.T.

Study Director

Date

That I State 440, 00

LTC Don W. Korte, Jr., COR

USAMRICD

Date

MREF Protocol 97 Medical Research and **Evaluation Facility** January 6, 1995 Page 17

Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

MREF Protocol 97 Amendment No. 2

Change: On page 5, replace Section 8.A.(11) with the following (deletions are shown as stricken, and additions are shown in bold type):

Diet - Purina Certified Swine Feed or other veterinarian-approved swine feed is available at all times. No contaminants are known to be present in the feed which would interfere with or affect the results of the study.

Reason:

The cost of having a lot of swine feed certified by Purina (quoted at \$1500) is too high to justify in terms of certifying the experimental conditions of a study outside the purview of Good Laboratory Practices regulations. This amendment also allows continuity in the swine's feed after shipment from the supplier in the event that the swine experience health problems when given Purina feed.

This change will have no impact on the study. Impact:

Thomas H. Snider, B.S., D.A.B.T.

Study Director

LTC Richard R. Stotts, COR

USAMRICD

MREF Protocol 97 Medical Research and Evaluation Facility May 8, 1995 Page 18

Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

MREF Protocol 97 Amendment No. 3

Change: On pages 9 and 10, replace Section 8.D.(3) with the following (deletions are shown as stricken, and additions are shown in bold type):

IPPSF Harvesting - Two days after IPPSF production, the swine is anesthetized and prepared for aseptic surgery as before. The peripheral surgery site is cleaned with surgical scrub solution, and care is taken to ensure that scrub solution does not contact the flap. A 3 mL volume of 1,000 USP units/mL of heparin is administered in a marginal ear vein. All sutures are removed from the base of the flap, and the flap is lifted slightly away from the donor surface with vessels intact. The superficial epigastric artery is cannulated, and the donor side is sutured closed. Other connecting tissues are clamped, severed, and ligated, and the flap is perfused with a flush solution and transferred to an assistant, who closes the flap with suture. The donor's wound is closed, and The swine is allowed to recover from anesthesia and returned to individual housing. Alternatively, the swine may be anesthetized with Beuthanasia or other, veterinarian-approved euthanasia solution. Remaining sutures from surviving swine are removed at 7 to 10 days after the IPPSF production stage.

Reason:

Asepsis is not required during the harvesting surgical procedure. The skin surface near the flap is cleaned with scrub solution to remove debris, but application of scrub solution to the flap may alter its transdermal characteristics and must be avoided. The flap is not sutured closed, as this may increase flap turgidity, an undesireable characteristic in a naive flap. Leaving open the remaining wounds, which are approximately 4 x 4-cm square each, promotes healing relative to suturing the wounds closed. Other euthanasia solutions that are more humane than Beuthanasia may become evident in the future. Any sutures left in the swine are made of 2-0 or 3-0 gut ligature, which dissolve and do not require removal.

Impact:

A few of these changes will enhance the success of harvesting a normal flap, but otherwise are intended to minimize discomfort in the swine.

Thomas H. Snider, B.S., D.A.B.T.

5-8-95

Date

Study Director

LTC Richard R. Stotts, COR

USAMRICD

10MRY95

Date

Establishment of the Porcine Isolated Perfused Skin Flap Model as a Decision Tree Network Screening Module for Assessing the Efficacy of Systemic Antivesicant Pretreatment and Treatment Compounds

Protocol Amendment No. 4

Change 1: Page 1, Section 1.

Change to: "Co-Principal Investigator and Manager: John B. Johnson, D.V.M., Medical Research and Evaluation Facility (MREF)".

Reason for change:

The principal investigator and manager has changed.

Change 2: Page 1, Section 3. Study Veterinarians.

Change to: "Tracy A. Peace, D.V.M. Frances M. Reid D.V.M., M.S., D.A.B.V.T., D.A.B.T."

Reason for change:

A study veterinarian has changed.

Change 3: Page 1, Section 4. Sponsor.

Change to: "U.S. Army Medical Research and Materiel Command (USAMRMC)".

Reason for change:

The name of the sponsoring organization has been changed.

Change 4: Page 1, Section 5. Sponsor Monitor.

Change to: "LTC Richard R. Stotts, D.V.M., Ph.D., U.S. Army Medical Research Institute of Chemical Defense (USAMRICD)".

Reason for change:

The sponsor monitor has changed.

Approved by:

Thomas H. Snider, B.S., D.A.B.T.

Study Director

11-8-95

Date

LTC Richard R. Stotts, D.V.M., Ph.D.

USAMRICD COR

Date

APPENDIX B

Figures

Figure 1. Control Chart of Dilute HD Doses Applied onto IPPSFs, with 95 Percent Confidence Limits

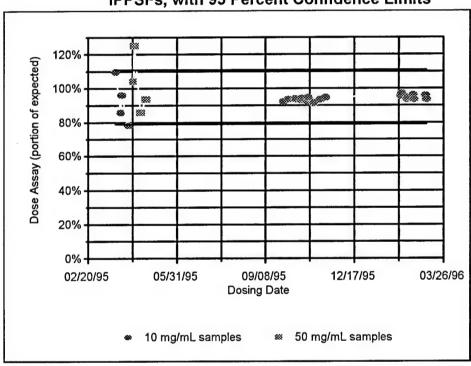


Figure 2. Schematic of the Perfusion Chamber

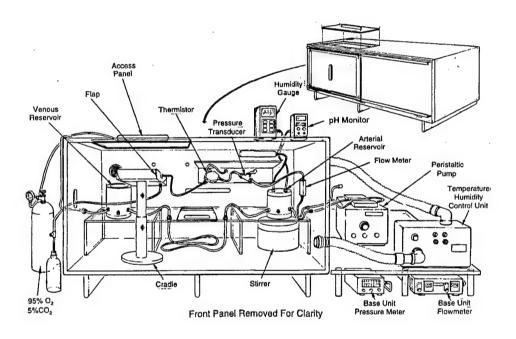


Figure 3. Vascular Resistance Averaged by Treatment Group for Flaps 2501 to 2554

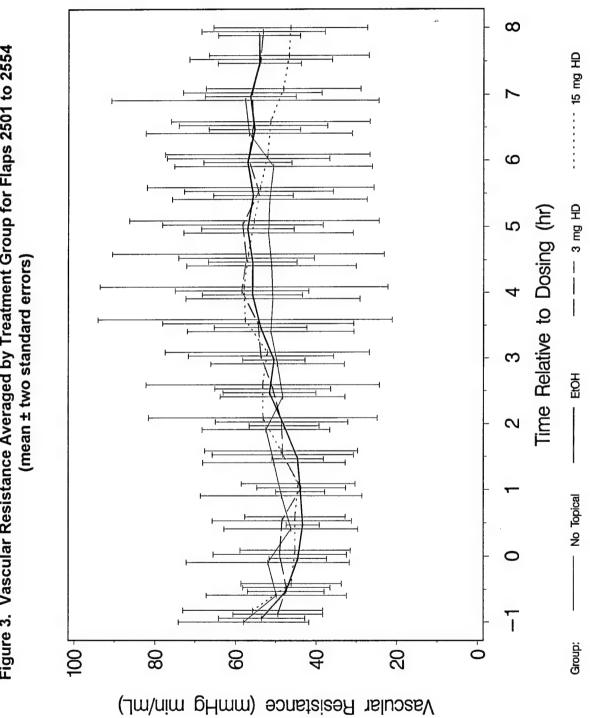


Figure 4. Vascular Resistance Normalized to t = 0 hr Value and Averaged by Treatment Group for Flaps 2501 to 2554

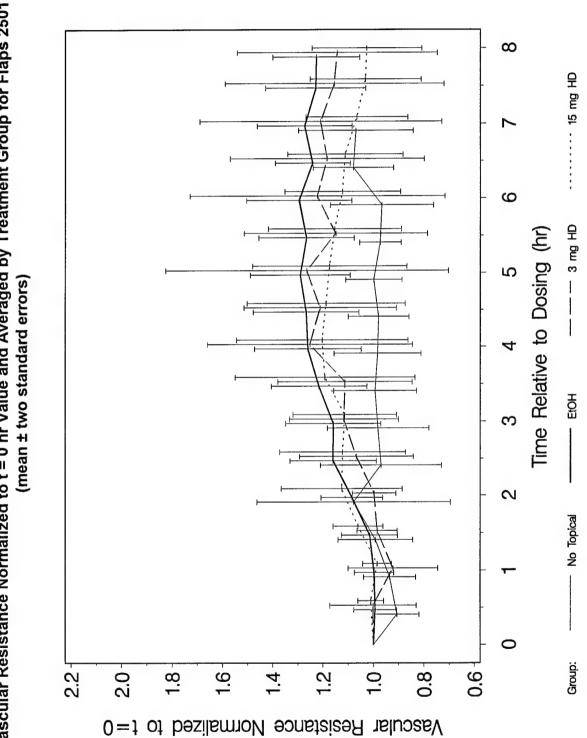


Figure 5. Glucose Utilization Averaged by Treatment Group for Flaps 2501 to 2554 (mean ± two standard errors)

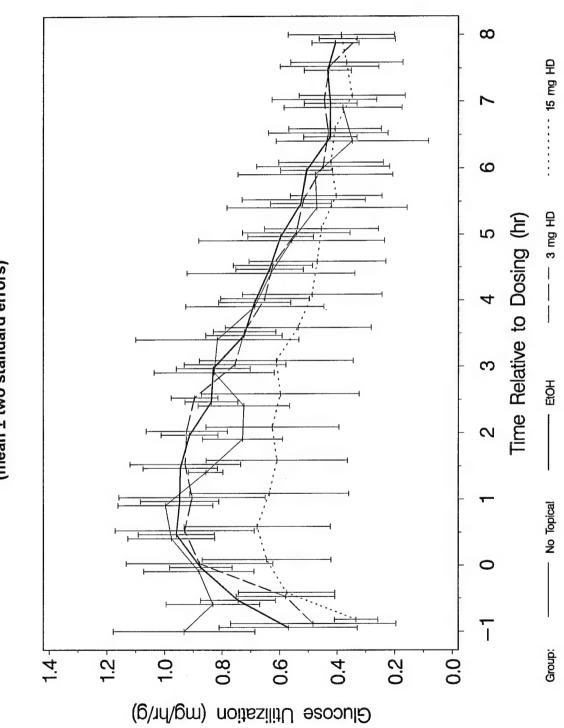


Figure 6. Cumulative Glucose Utilization Averaged by Treatment Group for Flaps 2501 to 2554

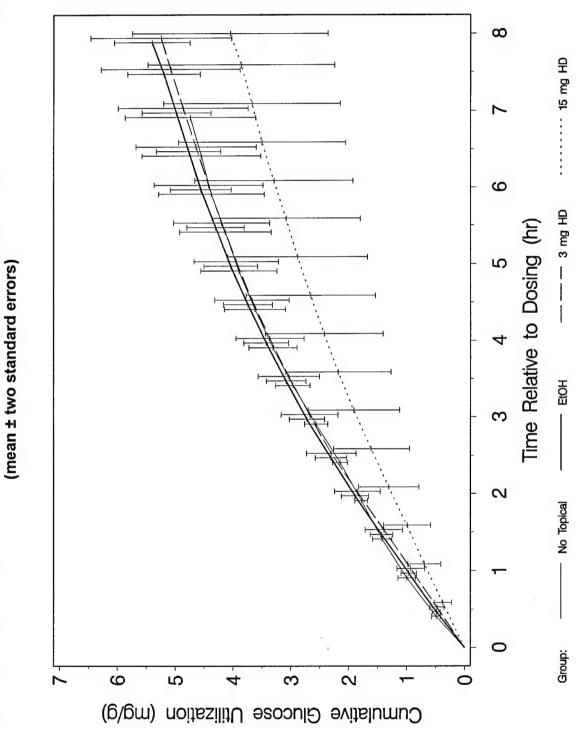
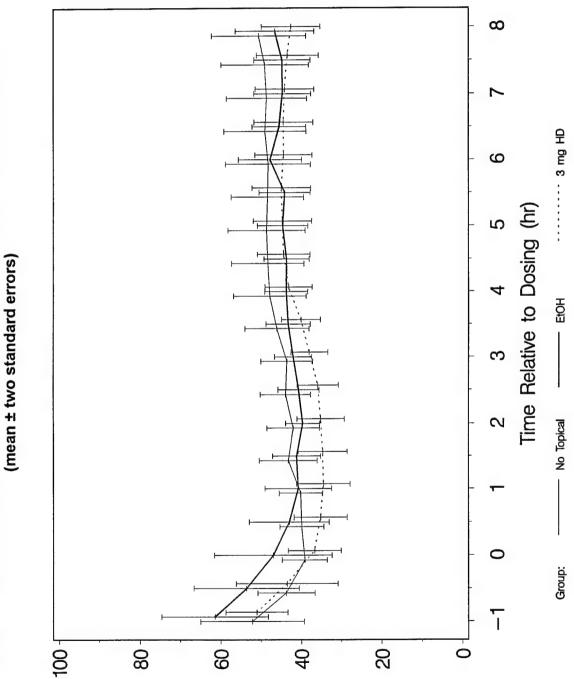


Figure 7. Vascular Resistance Averaged by Treatment Group for Flaps 2555 to 2598



Vascular Resistance (mmHg min/mL)

Figure 8. Vascular Resistance Normalized to t = 0 hr Value and Averaged by Treatment Group for Flaps 2555 to 2598

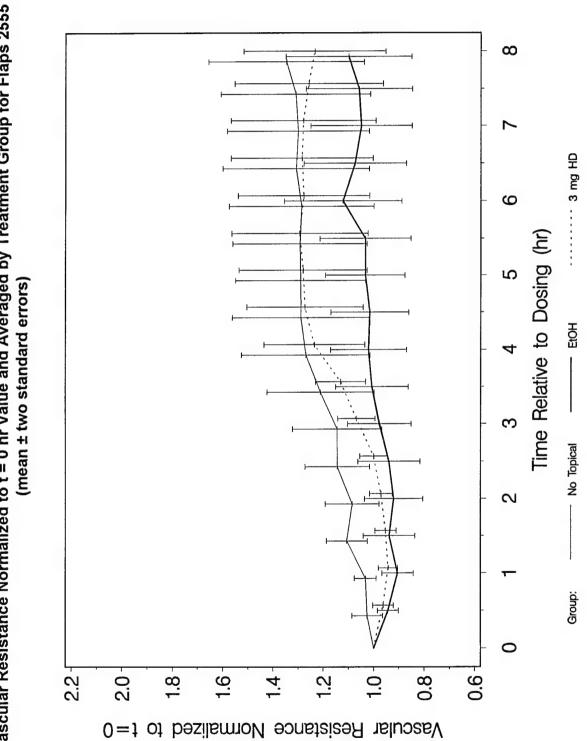


Figure 9. Glucose Utilization Averaged by Treatment Group for Flaps 2555 to 2598 (mean ± two standard errors)

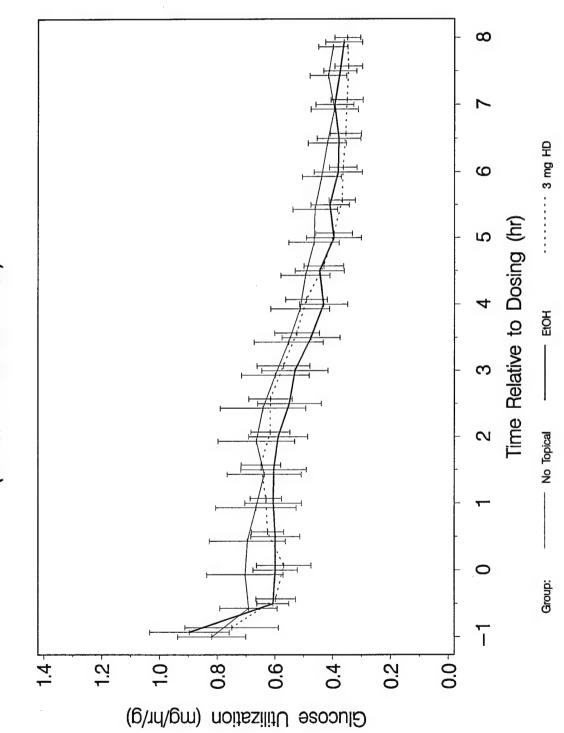


Figure 10. Cumulative Glucose Utilization Averaged by Treatment Group for Flaps 2555 to 2598

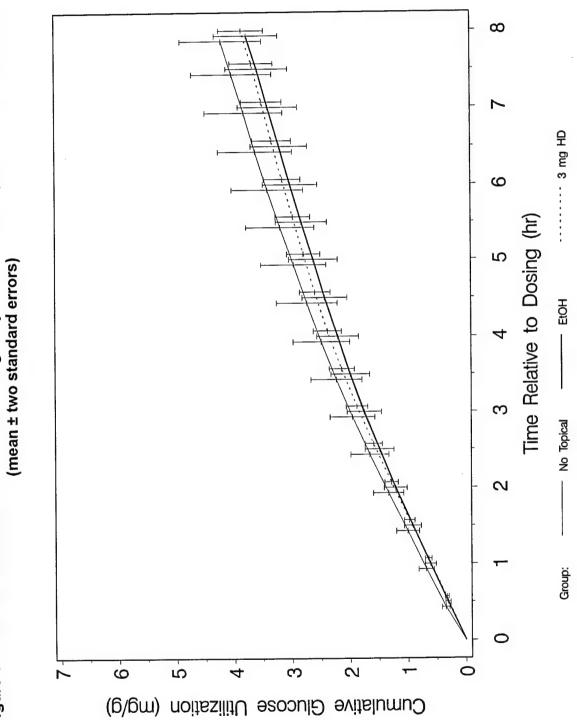
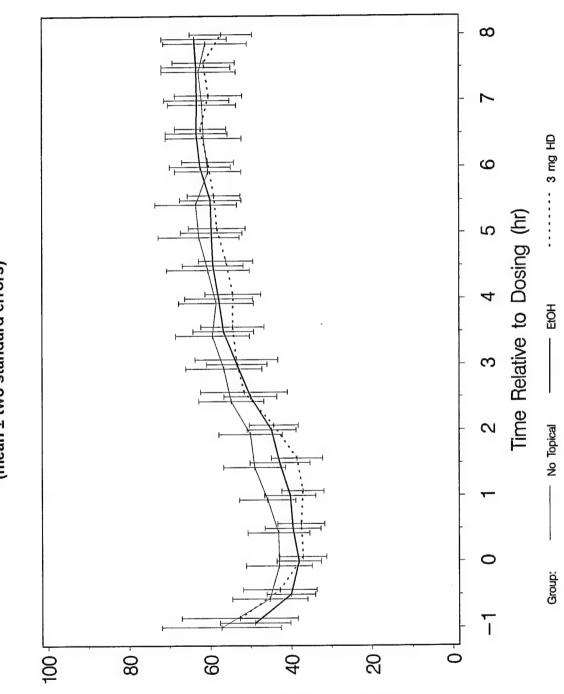


Figure 11. Vascular Resistance Averaged by Treatment Group for Flaps 2599 to 2640 (mean ± two standard errors)



Vascular Resistance (mmHg min/mL)

Figure 12. Vascular Resistance Normalized to t = 0 hr Value and Averaged by Treatment Group for Flaps 2599 to 2640

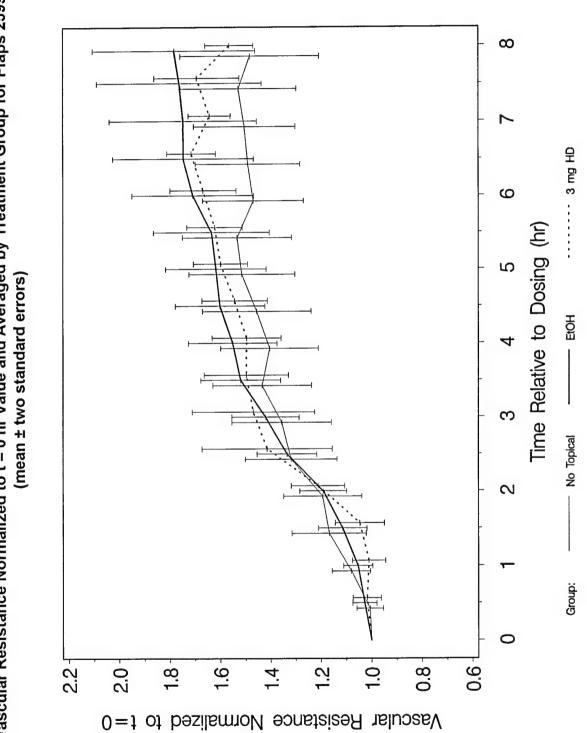


Figure 13. Glucose Utilization Averaged by Treatment Group for Flaps 2599 to 2640 (mean ± two standard errors)

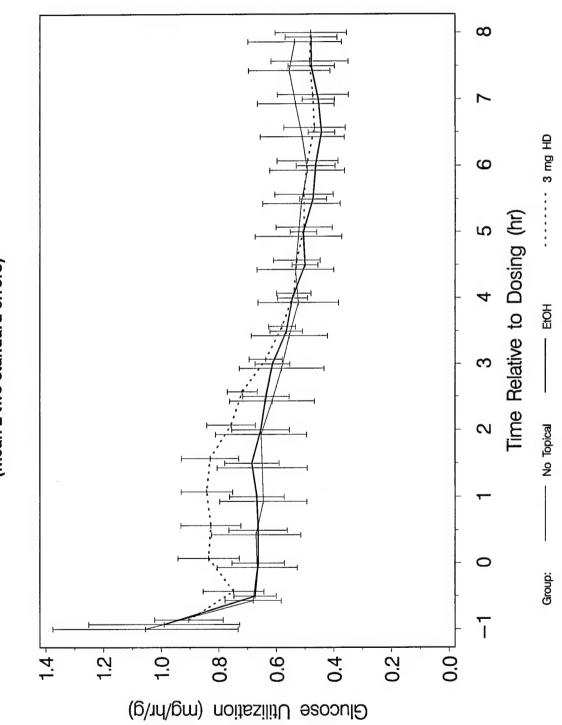
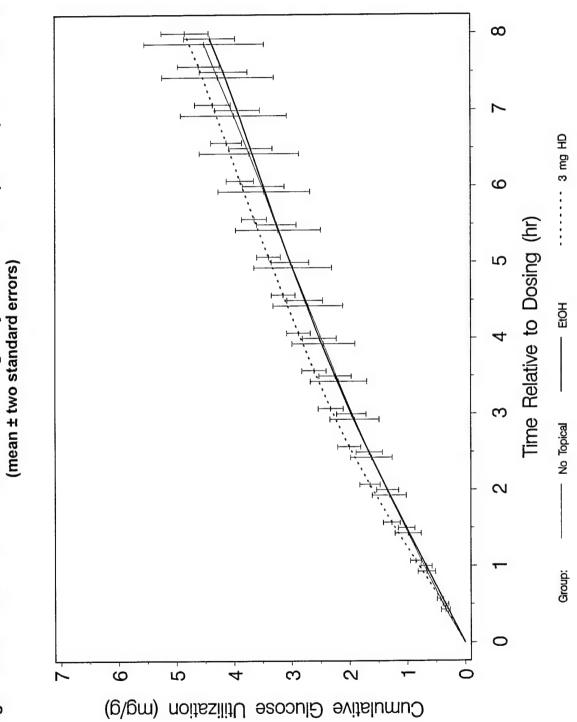


Figure 14. Cumulative Glucose Utilization Averaged by Treatment Group for Flaps 2599 to 2640



APPENDIX C

Summary Tables

Table 1. Standard Operating Procedures (SOPs) and Methods
Used in MREF Task 92-31

SOP No.	Method No.	Title
II-010		Standard Operating Procedure (SOP) For Application of Chemical Surety Materiel onto the Isolated Perfused Porcine Skin Flap
II-011		Standard Operating Procedure (SOP) For Cleaning the Isolated Perfused Porcine Skin Flap Apparatus
VII-023		Standard Operating Procedure (SOP) For the Surgical Preparation of the Isolated Perfused Porcine Skin Flap
	5/General	Method for pH Measurement Using the Fisher Accumet Model 955 Portable pH/mV Temperature Meter
	6/General	Method for Using the Hanna Instruments 8564 Thermohygrometer
	7/General	Method for Pumping Nutrient Media Through an Isolated Perfused Porcine Skin Flap with the Manostat Cassette® Pump
	8/General	Method for the Use of Matrx Quantiflex® VMC Small Animal Anesthesia Machine
	9/General	Method for the Use of the Propaq 106EL to Monitor Temperature and Invasive Pressure Within the Porcine Skin Flap Perfusion Chamber
	10/General	Method for the Preparation of Isolated Perfused Porcine Skin Flap (IPPSF) Media (2 Liters)
	11/General	Method for Operating and Maintaining the Isolated Perfused Porcine Skin Flap (IPPSF) Perfusion Chamber Heater Humidifier Unit
	13/General	Method for the Use of the Precision Systems Inc. μ- osmette [™] Model 5004 Automatic Osmometer
	32/In Vitro	Preparations for Performing an Experiment with an Isolated Perfused Porcine Skin Flap

Table 2. IPPSF Perfusion Media

Component	Amount Added	Units
Cell culture water	2.00	L
NaCl	13.78	g
KCI	0.71	g
CaCl ₂	0.56	g
KH₂PO₄	0.32	g
MgSO₄-7H₂O	0.58	g
NaHCO ₃	5.5	g
Dextrose	2.4	g
Bovine Serum Albumin, Fraction V	90	g
Amikacin SO₄	0.0625	g
The above mixture was adjusted to pH 7.4 HCl, filtered through glass wool, and sto approximately -20 C. After thawing and make a 2400-mL batch, the following co	red in 400-m I mixing enou	L aliquots at gh media to
Na Heparin	12,000	USP units
Penicillin G Sodium	30,000	USP units
The media pH was adjusted to 7.35 with	0.5 N NaOH	or 0.5 N HCI.

Table 3. List of IPPSFs Produced Under Task 92-31

ס	Route of	Administration
ent Dose	Volume	(hr)
Challenge Agent Dosed	Conc.	(mg/mL)
Cha		Material Vehicle
		Material
Stage 1	Surgery	Date
Animal Side	of Flap	Origin
	Animal	Number
	Animal	Supplier
	Flap	Number

							_		_							_		_		
,	•	,	1	topical	topical	•	•	•	•	•	ı	1	1	ı	•	1	1			•
,					,	1	1	,	,		ı	,	•	•	1	1	•			•
		ı	,	•	•			ı	ı	ı		•	1	t	ı	•	•			•
1	1	1	ı	Ethanol	Ethanol	1	ı	•	1	ı	1	ı	ı		1	ı	•			•
none			none																	
1/30/95	1/30/95	1/31/95	1/31/95	2/6/95	2/6/95	2/7/95	2/7/95	2/13/95	2/13/95	2/14/95	2/14/95	2/20/95	2/20/95	2/21/95	2/21/95	2/27/95	2/27/95	3/7/95	3/13/95	3/14/95
œ	ب	<u>~</u>	_	œ	_	œ	_1	œ	ب	ድ	_	œ	_	œ	_	œ	ب.			œ
95-263-3	95-263-3	95-18-3	95-18-3	95-263-4	95-263-4	95-258-1	95-258-1	95-21-2	95-21-2	95-22-1	95-22-1	95-21-3	95-21-3	95-22-2	95-22-2	95-24-4	95-24-4	95-24-3	95-24-5	95-24-1
Shady Side																				
2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

																								_
d	Route of Administration	•	topical	topical	topical	topical	topical	•	topical	topical	topical	topical	topical	topical	1	topical	topical	topical		topical	topical	topical	topical	topical
ent Dose	Volume (µL)	,	300	300	300	300	300	•	300	300	300	300	300	300	•	300	300	300		300	300	300	300	300
Challenge Agent Dosed	Conc. (mg/mL)	•	10	10	10	1	10	,	9		•	•	•	10	٠	20	20	ı			20	20	20	20
Cha	Material Vehicle	ı	Ethanol	Ethanol	Ethanol	Ethanol	Ethanol		Ethanol	Ethanoi	Ethanol	Ethanol	Ethanol	Ethanol	•	Ethanol	Ethanol	Ethanol		Ethanol	Ethanol	Ethanol	Ethanol	Ethanol
	Material	none	오	오	모	none	皇	none	오	none	none	none	none	웃	none	웊	呈	none		•	오	오	皇	모
Stage 1	Surgery Date	3/14/95	3/20/95	3/20/95	3/21/95	3/21/95	3/27/95	3/27/95	3/28/95	3/29/95	4/4/95	4/4/95	4/5/95	4/5/95	4/11/95	4/11/95	4/12/95	4/12/95	4/18/95	4/18/95	4/19/95	4/19/95	4/25/95	4/25/95
Animal Side	of Flap Origin	_	œ		œ	_	œ	_	œ	_	œ		œ		œ	_	깥	_	œ	_	œ	_	œ	_
	Animal Number	95-24-1	95-201-11	95-201-11	95-202-7	95-202-7	95-206-6	95-206-6	95-205-6	95-205-6	95-22-4	95-22-4	95-207-6	95-207-6	95-1-4	95-1-4	95-205-7	95-205-7	95-208-5	95-208-5	95-212-7	95-212-7	95-214-11	95-214-11
	Animal Supplier	Shady Side																						
	Flap Number	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

	þ	Route of	Administration
	yent Dose	Volume	ηL) (μL) A
	Challenge Agent Dosed	Conc.	Material Vehicle (mg/mL)
	Cha		Vehicle
			Material
	Stage 1	Surgery	Date
Animal	Side	of Flap	Origin
		Animal	Number
			١
		Anima	Supplie

topical	topical	•	topical	•	topical		-	1	topical	. 1	•	,	•	,	,	•	1	,	,		•	topical
300	300	ı	300	1	300			ı	300	•					1	1	ı					300
•	•	•	•	ı	,				•	,	1	,	,	•		ı	•	•	•			r
Ethanol	Ethanol	•	Ethanol	1	Ethanol			1	Ethanol	1	1	ı	1	1	1	,	1	1	1		1	Ethanol
,	1	none	•	none	1			none	1	1	•	•	•	1	1	,	ı	ı	ı		,	ı
4/26/95	4/26/95	5/2/95	5/2/95	5/3/95	5/3/95	2/9/95	5/9/95	5/10/95	5/10/95	8/29/95	8/29/95	8/30/95	8/30/95	9/6/95	9/6/95	9/14/95	9/14/95	9/19/95	9/19/95	9/20/95	9/20/95	9/26/95
œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	٦	œ
95-209-4	95-209-4	95-223-9	95-223-9	95-221-5	95-221-5	95-220-7	95-220-7	95-225-6	95-225-6	95-65-11	95-65-11	95-65-10	95-65-10	95-65-9	95-65-9	95-64-5	95-64-5	95-3-16	95-3-16	95-3-12	95-3-12	95-11-6
Shady Side	Isler Genetics																					
2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

	(Jul.)	(IIII)		י י י י י י י י י י י י י י י י י י י) 0	95-11-6	Supplier Selectics	2568
Material Vehicle (mg/mL) (µL) Administration	(nr)	(mg/ml_)	Vehicle	Material	Date	Origin	Number	Supplier	
Route of	Conc. Volume	Conc.			Surgery	of Flap	Animal	Animal	
d	ent Dose	Challenge Agent Dosed	Cha		Stage 1	Animal Side			

, ide	topical																					
- 00	200	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
, ç	2	9	ı	10	1	10	10		•	10	10		10	1	9	10	9	10	10	10	ı	10
1 2	Ethanol																					
٠ 5	2	皇	ı	오	•	웃	오	•	•	모	모		오	•	모	모	모	오	모	모	1	모
9/26/95	8/7/85	9/27/95	10/3/95	10/3/95	10/10/95	10/10/95	10/11/95	10/11/95	10/17/95	10/17/95	10/18/95	10/18/95	10/24/95	10/24/95	10/25/95	10/25/95	10/31/95	10/31/95	11/1/95	11/1/95	11/7/95	11/7/95
_ 0	Ľ	_	œ	_	œ	_	œ		œ	_	œ	_	œ	١	œ	_	œ		œ	٦	œ	
95-11-6	7-9-68	2-9-56	95-15-4	95-15-4	95-19-11	95-19-11	95-19-13	95-19-13	95-19-12	95-19-12	95-21-5	95-21-5	95-22-5	95-22-5	95-23-4	95-23-4	95-23-5	95-23-5	95-23-7	95-23-7	95-26-11	95-26-11
Isler Genetics																						
2568	5269	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

		,																							_
q	Route of	Administration	topical	•	topical	1	topical	topical	ı	ı	topical	•	topical	1	topical	topical									
Challenge Agent Dosed	Volume	(III)	300	300	300	300	300	1	•	300	•	300	•	300	•	300	300	ı	•	300	•	300	,	300	300
llenge Aç	Conc.	(mg/mL)	10	1	10	1	•			•	ı	•	•			•	•	•	•	ı	,	•	ı	ı	ı
Cha		Material Vehicle	Ethanol	Ethanol	Ethanol	Ethanol	Ethanol	1		Ethanol		Ethanol		Ethanol		Ethanol	Ethanol	,		Ethanol	,	Ethanol		Ethanol	Ethanol
		Material	유		모	•	•		•	•	•		,	,	,	ı	•		•	1	1	1		1	ı
Stage 1	Surgery	Date	11/8/95	11/8/95	11/14/95	11/14/95	11/15/95	11/15/95	11/21/95	11/21/95	11/28/95	11/28/95	11/29/95	11/29/95	12/5/95	12/5/95	12/6/95	12/6/95	12/12/95	12/12/95	12/13/95	12/13/95	1/10/96	1/10/96	1/16/96
Animal Side	of Flap	Origin	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ	_	œ
	Animal	Number	95-26-10	95-26-10	95-108-4	95-108-4	95-108-6	95-108-6	95-36-9	95-36-9	95-34-12	95-34-12	95-34-9	95-34-9	95-39-15	95-39-15	95-39-13	95-39-13	95-39-14	95-39-14	95-35-5	95-35-5	96-45-6	96-45-6	96-45-7
	Animal	Supplier	Isler Genetics																						
	Flap	Number	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

topical topical topical topical topical	300 300 300 300 300	0 6 6	Ethanol Ethanol Ethanol Ethanol	오·· 모모· ·	2/13/96 2/13/96 2/14/96 2/20/96 2/20/96 2/21/96	м – м – м – м	96-56-5 96-56-4 96-56-4 96-66-11 96-66-11	sler Genetics
topical	300	10	Ethanol	무	2/13/96	œ	96-56-5	Genetics
topical	300	ı	Ethanol	•	2/1/96	_	96-128-4	Isler Genetics
topical	300	10	Ethanol	오	2/7/96	œ	96-128-4	Isler Genetics
topical	300	10	Ethanol	오	2/6/96	_	96-128-5	Isler Genetics
topical	300	•	Ethanol	•	2/6/96	œ	96-128-5	Isler Genetics
topical	300	1	Ethanol	,	1/31/96	ب	96-51-5	Isler Genetics
ı	•	ι	•		1/31/96	œ	96-51-5	Isler Genetics
topical	300	•	Ethanol	,	1/30/96	_	96-46-8	Isler Genetics
	ı	•	,	•	1/30/96	œ	96-46-8	Isler Genetics
•	ı	•	1		1/24/96	ب	96-49-12	Isler Genetics
topical	300	1	Ethanol	1	1/24/96	œ	96-49-12	Isler Genetics
topical	300	,	Ethanol	•	1/23/96	_	96-50-10	Isler Genetics
ı	•	,		,	1/23/96	œ	96-50-10	Isler Genetics
topical	300	•	Ethanol		1/17/96	٦	96-47-7	Isler Genetics
1	ı			•	1/17/96	œ	96-47-7	Isler Genetics
ı	1	•	1	ı	1/16/96	_	96-45-7	sler Genetics
Administration	(hr)	(mg/mL)	Material Vehicle	Material	Date	Origin	Number	Supplier
Route of	Volume		Cha		Stage 1 Surgery	Side of Flap	Animal	Animal

Table 3. List of IPPSFs Produced Under Task 92-31 (Continued)

ğ	Route of	Administration	
ent Dose	Volume	(nL)	
Challenge Agent Dosed	Conc.	(mg/mL)	
Cha		Material Vehicle (
		Material	
Stage 1	Surgery	Date	
Animal Side	of Flap	Origin	
	Animal	Number	
	Animal	Supplier	
	Flap	Number	

Table 4. Descriptive Statistics for Four Physiologic Parameters Used to Monitor Skin Flaps 2501 - 2554 Shady Side Swine; Media Made with Sigma BSA

Tre					I Ime Aiter Dosing (nr)	,	
	Treatment	L	0	-	2	4	8
	Group	z	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)
Vascular Resistance (mmHg•min/mL)	Untreated	S.	52.0 (22.6)	48.6 (22.5)	52.4 (17.7)	50.8 (24.2)	57.1 (29.4)
	EtoH	80	44.5 (10.1)	43.9 (8.6)	48.0 (12.3)	55.8 (17.6)	54.2 (14.3)
E	3 mg HD	4	49.0 (16.6)	43.7 (11.0)	48.6 (16.4)	58.5 (16.6)	53.2 (15.4)
15	15 mg HD	5	45.2 (15.3)	44.5 (15.8)	53.2 (31.8)	57.9 (39.9)	46.4 (21.4)
Vascular Resistance Normalized to t=0	Untreated	5	1.00 (-)	0.94 (0.12)	1.08 (0.43)	0.98 (0.19)	1.14 (0.18)
	EtoH	8	1.00 (-)	1.00 (0.11)	1.09 (0.17)	1.26 (0.30)	1.23 (0.24)
e	3 mg HD	4	1.00 (-)	0.92 (0.18)	1.00 (0.09)	1.25 (0.41)	1.14 (0.40)
15	15 mg HD	5	1.00 (-)	0.98 (0.06)	1.13 (0.27)	1.20 (0.38)	1.03 (0.24)
Glucose Utilization (mg/hr/g)	Untreated	2	0.88 (0.22)	1.00 (0.18)	0.73 (0.16)	0.69 (0.27)	0.24 (0.24)
	EtoH	80	0.87 (0.15)	0.95 (0.19)	0.91 (0.14)	0.69 (0.18)	0.41 (0.12)
8	3 mg HD	4	0.88 (0.26)	0.90 (0.26)	0.92 (0.14)	0.65 (0.15)	0.33 (0.13)
15	15 mg HD	5	0.65 (0.25)	0.64 (0.31)	0.63ª,b (0.26)	0.49 (0.27)	0.39 (0.21)
Cumulative Glucose Utilization (mg/g)	Untreated	5	0.00 (-)	0.99 (0.17)	1.78 (0.12)	3.31 (0.47)	4.36 (1.25)
	EtOH	80	0.00 (-)	0.96 (0.19)	1.89 (0.34)	3.43 (0.55)	5.40 (0.92)
Е	3 mg HD	4	0.00 (-)	0.92 (0.24)	1.85 (0.39)	3.36 (0.59)	5.25 (1.22)
16	15 mg HD	2	0.00 (-)	0.69 (0.32)	1.31 (0.58)	2.42 (1.14)	4.05 (1.89)

 $^{\rm a}$ Mean is significantly less than that observed for the EtOH group (p < 0.05). $^{\rm b}$ Mean is significantly less than that observed for the 3 mg HD group (p < 0.05).

Table 5. Descriptive Statistics for Four Physiologic Parameters Used to Monitor Skin Flaps 2555 - 2598 Isler Genetics Swine; Media Made with Sigma BSA

				Ľ	Time After Dosing (hr)	r)	
Endpoint	Treatment Group	z	0 Mean (S.D.)	1 Mean (S.D.)	2 Mean (S.D.)	4 Mean (S.D.)	8 Mean (S.D.)
Vascular Resistance (mmHg•min/mL)	Untreated	12	39.1 (9.7)	40.1 (9.3)	42.0 (11.3)	47.8 (15.7)	50.6 (20.2)
	EtOH	11	47.0 (24.2)	40.7 (13.7)	39.6 (7.0)	43.7 (8.9)	46.6 (16.2)
	3 mg HD	16	36.7 (13.2)	34.5 (13.3)	35.2 (11.7)	43.1 (11.7)	42.6 (14.5)
Vascular Resistance Normalized to t=0	Untreated	12	1.00 (-)	1.03 (0.08)	1.08 (0.19)	1.27 (0.44)	1.35 (0.54)
	EtOH	11	1.00 (-)	0.90° (0.10)	0.92° (0.19)	1.02 (0.25)	1.10 (0.41)
-	3 mg HD	16	1.00 (-)	0.94° (0.08)	0.97 (0.09)	1.24 (0.40)	1.23 (0.56)
Glucose Utilization (mg/hr/g)	Untreated	12	0.70 (0.23)	0.67 (0.24)	0.67 (0.23)	0.51 (0.18)	0.40 (0.08)
	EtoH	11	0.60 (0.13)	0.61 (0.16)	0.59 (0.17)	0.43 (0.14)	0.36 (0.11)
	3 mg HD	16	0.57 (0.19)	0.63 (0.11)	0.62 (0.14)	0.49 (0.15)	0.35 (0.09)
Cumulative Glucose Utilization (mg/g)	Untreated	12	0.00 (-)	0.68 (0.23)	1.33 (0.45)	2.48 (0.85)	4.21 (1.23)
	Етон	11	0.00 (-)	0.61 (0.15)	1.21 (0.33)	2.20 (0.60)	3.77 (0.92)
	3 mg HD	16	0.00 (-)	0.64 (0.11)	1.28 (0.23)	2.38 (0.49)	3.86 (0.78)

^c Mean is significantly less than that observed for the untreated group (p < 0.05).

Table 6. Descriptive Statistics for Four Physiologic Parameters Used to Monitor Skin Flaps 2599 - 2640 Isler Genetics Swine; Media Made with Mallinckrodt BSA

				F	Time After Dosing (hr)	r)	
Endpoint	Treatment Group	z	0 Mean (S.D.)	1 Mean (S.D.)	2 Mean (S.D.)	4 Mean (S.D.)	8 Mean (S.D.)
Vascular Resistance (mmHg·min/mL)	Untreated	1.	43.0 (13.5)	45.8 (11.6)	50.0 (13.0)	58.5 (15.4)	61.2 (15.5)
	EtoH	17	38.1 (11.3)	40.2 (13.0)	44.8 (12.4)	57.9 (17.3)	63.9 (16.7)
	3 mg HD	10	37.0 (9.2)	37.1 (8.3)	44.3 (9.5)	54.3 (10.9)	57.3 (12.2)
Vascular Resistance Normalized to t=0	Untreated	11	1.00 (-)	1.08 (0.13)	1.19 (0.26)	1.40 (0.32)	1.48 (0.41)
	EtOH	17	1.00 (-)	1.05 (0.12)	1.19 (0.19)	1.55 (0.36)	1.78 (0.66)
	3 mg HD	10	1.00 (-)	1.01 (0.10)	1.21 (0.17)	1.50 (0.22)	1.56 (0.15)
Glucose Utilization (mg/hr/g)	Untreated	1	0.67 (0.23)	0.65 (0.25)	0.65 (0.26)	0.52 (0.23)	0.54 (0.26)
	EtOH	17	0.66 (0.19)	0.67 (0.20)	0.65 (0.21)	0.54 (0.11)	0.48 (0.19)
	3 mg HD	10	0.84 (0.17)	0.84 (0.14)	0.76 (0.13)	0.54 (0.10)	0.48 (0.20)
Cumulative Glucose Utilization (mg/g)	Untreated	11	0.00 (-)	0.66 (0.25)	1.31 (0.49)	2.45 (0.91)	4.51 (1.72)
	EtOH	17	0.00 (-)	0.67 (0.20)	1.34 (0.39)	2.52 (0.61)	4.41 (0.91)
	3 mg HD	10	0.00 (-)	0.85 (0.16)	1.64 (0.28)	2.88 (0.33)	4.85 (0.65)

Table 7. Incidence Rates of Histopathologic Endpoints for Flaps Perfused with Media Made with Bovine Serum Albumin from Two Sources

Tissue Type	Treatment	Epidermal- Dermal Separation	Intracellular Edema	Intercellar Edema	Dark Basal Cells	Sample Size
		Media Made w	Media Made with Sigma BSA			
Pig Skin at Stage 1						
Surgery	None	0.00	0.00	00.0	0.00	22
Flap	Untreated	08'0	06.0	0.20	0.10	10
Flap	Ethanol, 300 µL	0.29	0.86	0.29	0.00	7
Flap	XHD, 3 mg	0.29	0.86	0.29	0.14	4
		Media Made with	Media Made with Mallinckrodt BSA			
Pig Skin at Stage 1						
Surgery	None	0.00	0.00	0.00	0.00	15
Flap	Untreated	0.58	0.67	0.08	0.08	12
Flap	Ethanol, 300 µL	0.61	0.83	0.17	0.33	18
Flap	XHD, 3 mg	0.71	0.75	0.13	0.50	·∞

'Epidermal-dermal separation was scored as a "?" for one specimen in this treatment group.

Table 8. Comparison of Incidence Rates of Histopathological Endpoints
Between Selected Pairs of Treatment Groups

Pair of Treatment Groups Compared	Source of BSA Used in Perfusion Media	Histopathological Endpoint	Incidence Rate, Group 1	Incidence Rate, Group 2	Fisher's Exact Test Comparing Groups (p-value)
Group 1: Stage 1-Sampled	Sigma	Epidermal-dermal Separation	0/22	8/10	<0.001
Normal Pig Skin		Intracellular Edema	0/22	9/10	<0.001
Group 2: Untreated Flaps		Intercellular Edema	0/22	2/10	0.091
Ontreated Flaps		Dark Basal Cells	0/22	1/10	0.312
	Mallinckrodt	Epidermal-dermal Separation	0/15	7/12	<0.001
		Intracellular Edema	0/15	8/12	<0.001
		Intercellular Edema	0/15	1/12	0.444
		Dark Basal Cells	0/15	1/12	0.444
Group 1: Untreated Flaps	Sigma	Epidermal-dermal Separation	8/10	2/7	0.058
Group 2:		Intracellular Edema	9/10	6/7	1.000
Ethanol, 300 µL		Intercellular Edema	2/10	2/7	1.000
		Dark Basal Cells	1/10	0/7	1.000
	Mallinckrodt	Epidermal-dermal Separation	7/12	11/18	1.000
		Intracellular Edema	8/12	15/18	0.392
		Intercellular Edema	1/12	3/18	0.632
		Dark Basal Cells	1/12	6/18	0.193
Group 1: Ethanol, 300 μL	Sigma	Epidermal-dermal Separation	2/7	4/14	1.000
Group 2:		Intracellular Edema	6/7	12/14	1.000
HD, 3 mg		Intercellular Edema	2/7	4/14	1.000
		Dark Basal Cells	0/7	2/14	0.533
	Mallinckrodt	Epidermal-dermal Separation	11/18	5/7°	1.000
		Intracellular Edema	15/18	6/8	0.628
		Intercellular Edema	3/18	1/8	1.000
		Dark Basal Cells	6/18	4/8	0.664

Epidermal-dermal separation was scored as a "?" for one specimen in this treatment group.

Table 9. Comparison of Incidence Rates of Frank Blisters on Flaps from Three Sets of Experiments

			Source of	Incidence	Incidence	Fisher's Exact
Pair of Treatment Groups Compared	Flap Set	Source of Swine	BSA Used in Perfusion Media	Rate, Group 1	Rate, Group 2	Test Comparing Groups (p-value)
Group 1:	2501 to 2554	Shady Side Farms	Sigma	9/2	6/0	1.000
Onlieated Flaps	2555 to 2598	Isler Genetics	Sigma	0/14	2/12	0.203
Group 2: Ethanol, 300 µL	2599 to 2640	Isler Genetics	Mallinckrodt	5/14	7/18	1.000
Group 1:	2501 to 2554	Shady Side Farms	Sigma	6/0	0/4	1.000
Etilatioi, 300 pr	2555 to 2598	Isler Genetics	Sigma	2/12	0/17	0.163
Group 2: HD, 3 mg	2599 to 2640	Isler Genetics	Mallinckrodt	7/18	3/10	0.703
Group 1:	2501 to 2554	Shady Side Farms	Sigma	6/0	9/2	1.000
Eulanol, 300 pc	2555 to 2598	Isler Genetics	Sigma	NA	NA	AN
Group Z: HD, 15 mg	2599 to 2640	Isler Genetics	Mallinckrodt	NA	NA	NA

NA = not available; 15 mg doses of HD were administered to the first set of flaps only.

Note: when blister rates were compared for the effect of the type of BSA used in the media, the incidence for Mallinckrodt BSA was significantly greater than for Sigma BSA in untreated flaps (5/14 versus 0/14, respectively, p = 0.041) and in 3 mg of HD-treated flaps (3/10 versus 0/17, respectively, p = 0.041), but not for ethanol-treated flaps (7/18 versus 2/12, respectively, p = 0.249).

APPENDIX D

NCSU-CPTC Report

Report on Phase I and Phase II of Battelle IPPSF Perfusion

August 4, 1995

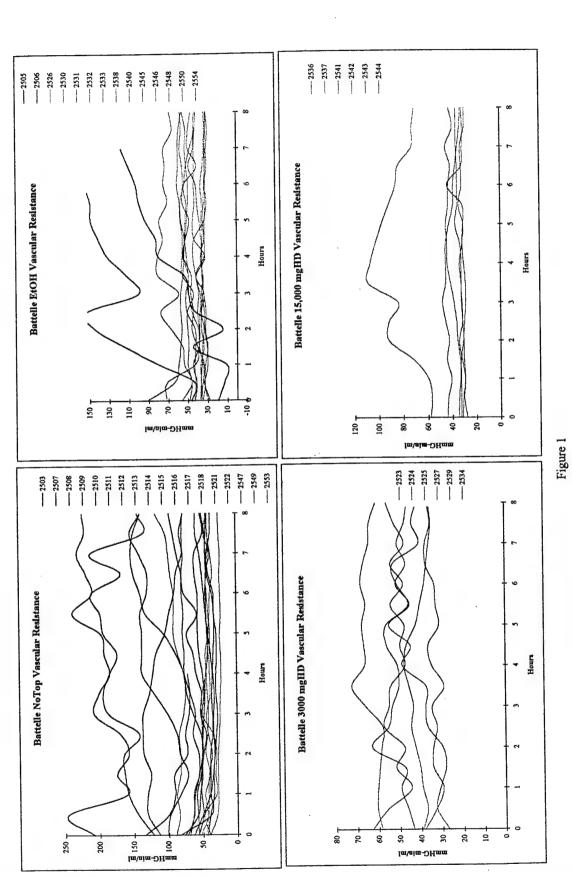
James D. Brooks M.S., Nancy A. Monteiro-Riviere Ph.D., Jim E. Riviere DVM, Ph.D.

Cutaneous Pharmacology and Toxicology Center College of Veterinary Medicine North Carolina State University Raleigh, NC 27606

Report on Phase I and Phase II of Battelle IPPSF Perfusion

Selection Process:

We eliminated IPPSF #'s 2501, 02 because there were no pressure readings. Figure 1 shows vascular resistance profiles for 44 Battelle IPPSFs. The plots in red are skin flaps run before March 14,1995, when Jim Brooks visited MREF, and those in green are after March 14, 1995. We selected only skin flaps run after this visit since several suggestions were made that would have influenced the "art" of IPPSF perfusion. We eliminated IPPSFs 2503 through 2518 on this basis--the importance of attaining a low pressure was not fully realized. About 25% (12 of 44) of the skin flaps were eliminated from analysis due to the presence of RBC's in the histology samples. We hypothesize that the RBC's are present due to incomplete perfusion of the skin flaps--possibly a result of using a more viscous flushing solution (i.e. Dulbecco's medium) or due to cannulation of a smaller artery. The IPPSFs that were eliminated due to RBC's are 2513, 14, 15, 17, 23, 26, 28, 29, 32, 37, 38, and 54. Table 1 lists the 22 Battelle IPPSFs that were selected for comparison against the CPTC IPPSFs. All CPTC skin flaps that fit the "normal" protocol were used for comparison--that is, 8 hour perfusion, 1 ml/min flow rate, 120 mg/dl glucose concentration. All treated groups and controls were then compared.



Battelle Vascular Resistance Before and After 3/14/95

BEFORE MARCH 14,1995

AFTER MARCH 14,1995

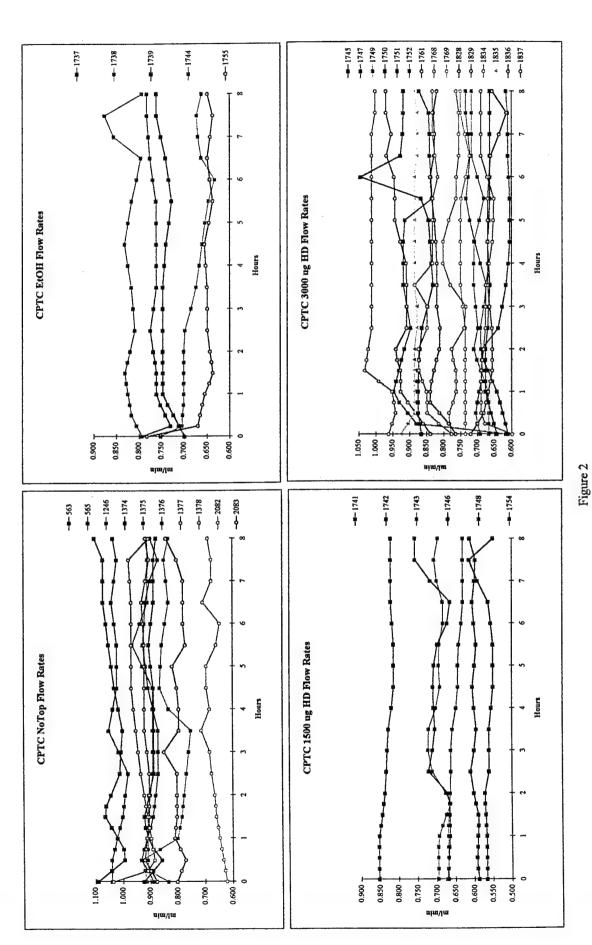
Table 1
Selection Process for Battelle IPPSF's

Date	IPPSF#	Dose	Selection
1-Feb	2501	NoTop	No pressure readings
1-Feb	2502	NoTop	No pressure readings
2-Feb	2503	NoTop	High pressure readings prior to 3/14/95
2-Feb	2504	aborted	Aborted-poor artery integrity
8-Feb	2505	EtOH	High pressure readings prior to 3/14/95
8-Feb	2506	EtOH	High pressure readings prior to 3/14/95
9-Feb	2507	NoTop	High pressure readings prior to 3/14/95GU=0.
9-Feb	2508	NoTop	High pressure readings prior to 3/14/95
15-Feb	2509	NoTop	High pressure readings prior to 3/14/95
15-Feb	2510	NoTop	High pressure readings prior to 3/14/95-pH=7.66 at 15 m
16-Feb	2511	NoTop	High pressure readings prior to 3/14/95
16-Feb	2512	NoTop	Prior to 3/14/95
22-Feb	2513	NoTop	RBC's seen in histology samples
22-Feb	2514	NoTop	RBC's seen in histology samples-GU=0.
23-Feb	2515	NoTop	RBC's seen in histology samples
23-Feb	2516	NoTop	Prior to 3/14/95pH=7.18 at 15 min.
1-Маг	2517	NoTop	RBC's seen in histology samples
1-Mar	2518	NoTop	Prior to 3/14/95-pH=7.21 at 3 hr.
7-Mar	2519	aborted	Pig died
8-Mar	2520	aborted	Pig died
16-Mar	2521	NoTop	SELECTED
16-Mar	2522	NoTop	SELECTED
22-Mar	2523	3000 ug HD	RBC's seen in histology samples
22-Mar	2524	3000 ug HD	SELECTED
23-Mar	2525	3000 ug HD	SELECTED
23-Mar	2526	EtOH	RBC's seen in histology samples
29-Mar	2527	3000 ug HD	SELECTED
29-Mar	2528	NoTop	Catheter came out-RBC's seen in histology samples
30-Mar	2529	3000 ug HD	RBC's seen in histology samples
30-Mar	2530	EtOH	SELECTED
5-Apr	2531	EtOH	SELECTED
5-Apr	2532	EtOH	RBC's seen in histology samples
6-Apr	2533	EtOH	SELECTED
6-Apr	2534	3000 ug HD	SELECTED
12-Apr	2535	NoTop	Perfusion stoppedlow glucose, high pressure
12-Apr	2536	15000 ug HD	SELECTED
13-Apr	2537	15000 ug HD	RBC's seen in histology samples
13-Apr	2538	EtOH	RBC's seen in histology samples
19-Apr	2539	NoTop	Perfusion stopped-low glucose, high pressure
19-Apr	2540	EtOH	SELECTED
20-Apr	2541	15000 ug HD	SELECTED
20-Apr	2542	15000 ug HD	SELECTED
26-Apr	2543	15000 ug HD	SELECTED
26-Apr	2544	15000 ug HD	SELECTED
27-Apr	2545	EtOH	SELECTED
27-Apr	2546	EtOH	SELECTED
3-May	2547	NoTop	SELECTED
3-May	2548	EtOH	SELECTED
4-May	2549	NoTop	SELECTED
4-May	2550	EtOH	SELECTED
10-May	2551	aborted	Abortedpoor artery integrity
10-May	2552	aborted	Aborted-poor artery integrity
11-May	2553	NoTop	SELECTED
11-May	2554	EtOH	RBC's seen in histology samples

Flow rates:

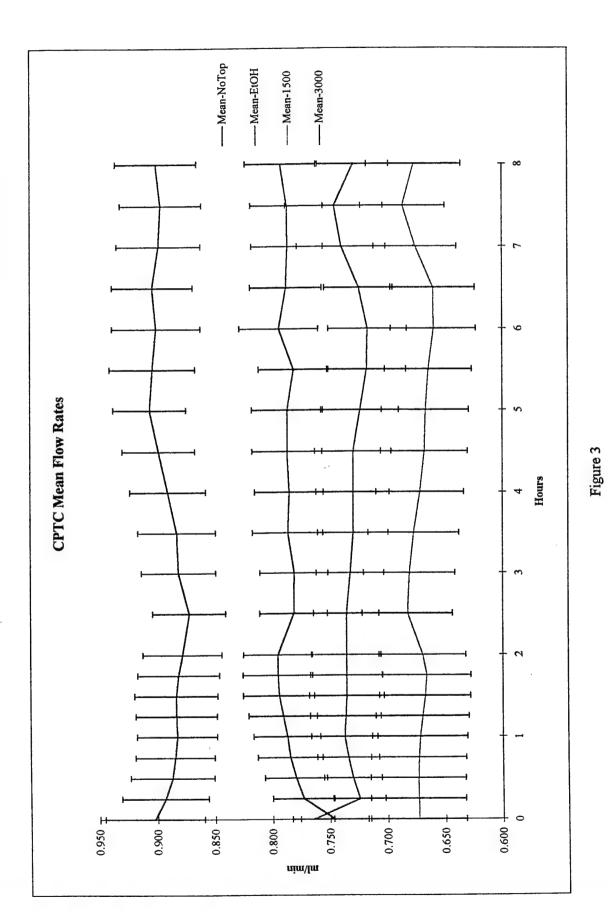
Figures 2 and 3 are CPTC flow rates for all treatments. Compare these to Figures 4 and 5 of the same data for Battelle. The primary impression is that independent of the magnitude of the flow rate, CPTC flow rates remain constant as evidenced by flatter and smoother flow profiles.

An analysis of variance (ANOVA) was performed on the Battelle vs CPTC flow rates. First we calculated the coefficient of variance (CV = SEM/Mean flow rate) for each of the 22 Battelle and 36 CPTC IPPSFs. Then we ran an analysis of this variance for each dose group and another for just Battelle vs CPTC. The mean CV for each Battelle dose group is higher than each CPTC dose group (P = 0.0779), although not significantly different. The comparison of the CV of all the Battelle flow rates to the CV of all the CPTC flow rates is significantly different (P = 0.0012). We performed the ANOVA with Microsoft Excel and with SAS (SAS Institute, Cary NC). The results were the same. Table 2 lists the results of the ANOVA performed by Microsoft Excel. Appendix A(1) is a printout of the ANOVA performed by SAS on the flow rate CVs. Three Battelle IPPSFs (2534, 2542, and 2543) assumed a constant flow rate, which resulted in a CV of zero. These were not used in the ANOVA for flow rate. Column two (T-Grouping) of the ANOVA section of Table 2 is the results of T-Test (LSD) grouping. Groups with like letters are from the same population, those with differing letters are from different populations (P = 0.05). Note that the mean flow rate from Battelle no-topical-dose controls is different from all mean flow rates for CPTC. Mean CVs from all Battelle flow rates are significantly higher compared to all the mean flow rate CVs from CPTC (P = 0.0012)

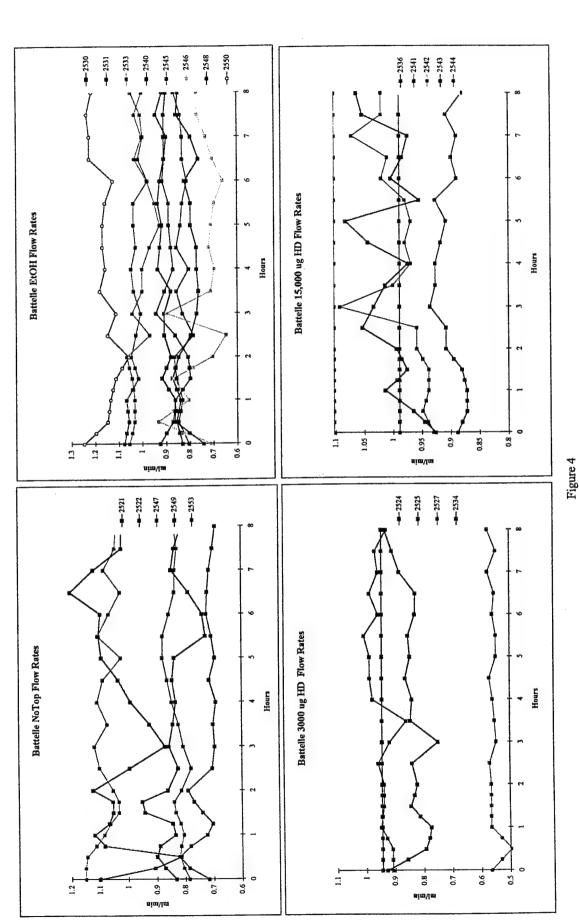


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CPTC Individual Flow Rates

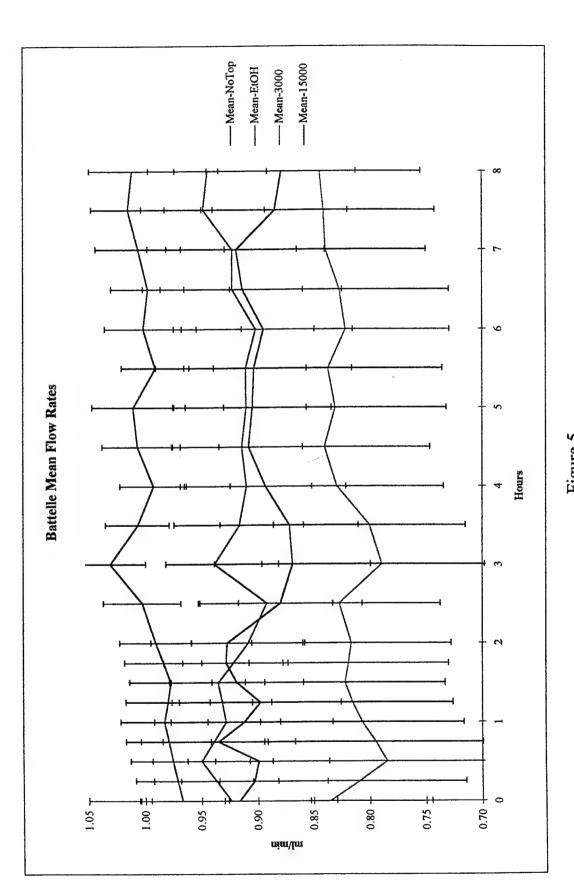


CPTC Mean Flow Rates



Battelle Individual Flow Rates

IPPSF 2534, 2542, and 2543 had estimated flow rates-problems with flowmeter calibration.



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Figure 5
Battelle Mean Flow Rates

CPTC vs Battelle Flow Rate Coefficient of Variance

	C Bar	CLLC
	:	Battelle

																																														_
	CofV	0.0065	0.0039	0.0137	0.0038	0.0048	0.0057	0.0029	0.0088	0.0084	0.0054	0.0064	0.0010	0.0040	0.0086	0.0044	0.0051	0.0102				0.0065	0.0012	06000	0.0061	0.0027	0.0176	0.0060	0.0068	0.0070	0.0023	0.000	0.0002	0.0026	0.0047	0.0063	8900.0	0.0010	0.0025	0.0039	0.0045	0.0057	0.0094	0.0053	0.0052	0.0010
CPTC	DOSE	C-NoTop			C-ETOH	C-ETOH	C-ETOH	C-ETOH	C-ETOH					03000	3000	C3000	2000	3000	C3000	C3000	C3000			C1500	C1500	C1500	C1500	C1500	C1500																	
	IPPSF#	563	265	1246	1374	1375	1376	1377	1378	2082	2083			1737	1738	1739	1744	1755					1745	1747	1749	1750	1751	1752	1761	1768	1769	1828	1834	1835	1836	1837			1741	1742	1743	1746	1748	1754		
	^	66	15	83	66	69						21	23	66	26	82	53	53	32	32	95	8 8	21	12 02	73												16	129	060	20			101		080	010
	CofV	0.0139	0.0115	0.0083	0.0199	0.0069						0.0121	0.0023	0.0099	0.0056	0.0082	0.0053	0.0053	0.0232	0.0132	0.0095	0.0100	0.0021	0.0079	0.0073	0											0.0091	0.0029	0.0000	0.0050	0	0	0.0101		0.0080	0.0010
Battelle	DOSE	B-NoTop	B-NoTop	B-NoTop	B-NoTop	B-NoTop	•							B-EtOH		00000	B3000	B3000	B3000													B15000	B15000	B15000	B15000	B15000										
	IPPSF#	2521	2522	2547	2549	2553						MEAN	SEM	2530	2531	2533	2540	2545	2546	2548	2550	MEAN	SEM	2525	2527	2534											MEAN	SEM	2536	2541	2542	2543	2544		MEAN	SEM

Analysis of Variance

All Groups

SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Variance	
B-NoTop	A	5	0.0604	0.0121	0.000027	
B-EtOH	AB	∞	0.0802	0.0100	0.000036	
B3000	AB	e	0.0274	0.0091	0.000007	
B15000	AB	6	0.0241	0.0080	0.000007	
C-NoTop	В	10	0.0640	0.0064	0.000010	
C-ETOH	В	2	0.0323	0.0065	0.000008	
C1500	В	9	0.0313	0.0052	0.000005	
C3000	В	15	0.1017	0.0068	0.000015	
ANOVA						
Source of Variation	SS	df	WS	F	P-value	F crit
Between Groups	0.00022	7	0.00003	1.9805	0.0779	2.2118
Within Groups	0.00075	47	0.00002			
Total	0.0010	54				

CPTC vs Battelle

		Anova: Single Factor	gle Factor			
SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Variance	
Battelle	A	19	0.1921	0.0101	0.000023	
CPTC	В	36	0.2293	0.0064	0.000011	-
ANOVA						
Source of Variation	SS	fр	WS	F	P-value	F crit
Between Groups	0.0002	-	0.00017	11.6488	0.0012	4.0230
Within Groups	0.0008	53	0.00001			
F	01000	2				

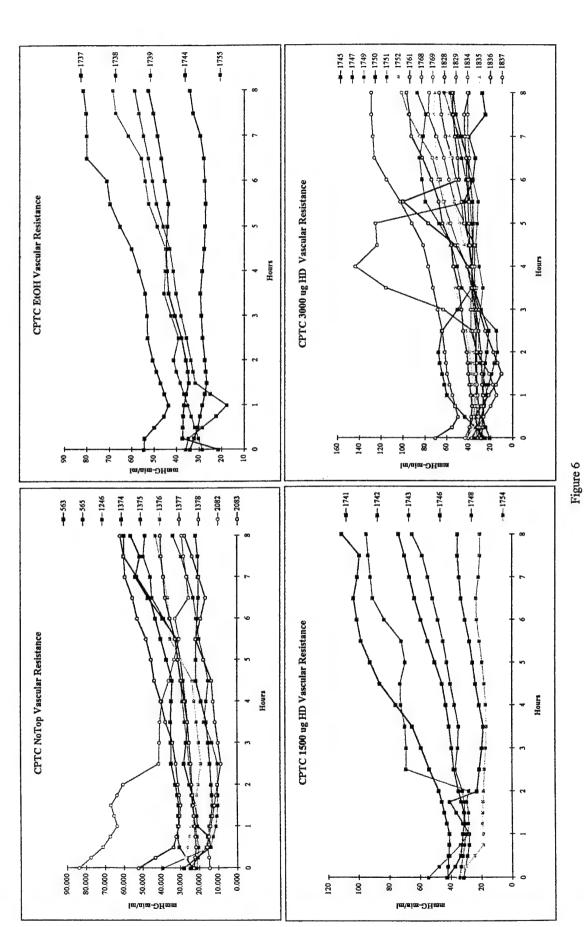
Note: IPPSFs 2534, 2542, and 2543 assumed linear flow rates. These were not used in the calculation of the means or the analysis of variance.

Vascular Resistance:

Figure 6 and 7 demonstrate the analysis of CPTC vascular resistance (VR) profiles, demonstrating a previously documented dose response increase in VR with HD. Figures 8 and 9 represent the identical treatment of Battelle data. Note the individual variations, lack of a consistent within-treatment profile shape, and lack of a between-treatment dose response. This can be seen especially well in Figures 7b and 9b, where the treated Battelle IPPSF shapes do not differ from the controls. The normal analysis used by CPTC is to assess treatment changes in VR normalized by the initial value. However, this assumes similar shape profiles within a treatment and just improves the statistical power of the study. This analysis worsened the Battelle data and thus for clarity, we elected to use the raw data to illustrate protocol and technique defects. Note the overall higher VR (2X) in Battelle vs CPTC no-topical-dose controls. Also, unlike CPTC, the variance of the VR (see error bars) increases over the course of the experiment in these control flaps. This is a serious concern since it suggests the control preparation is not "normal" and thus would not be expected to biologically respond to treatments in a normal behavior. Unfortunately, this is what happened.

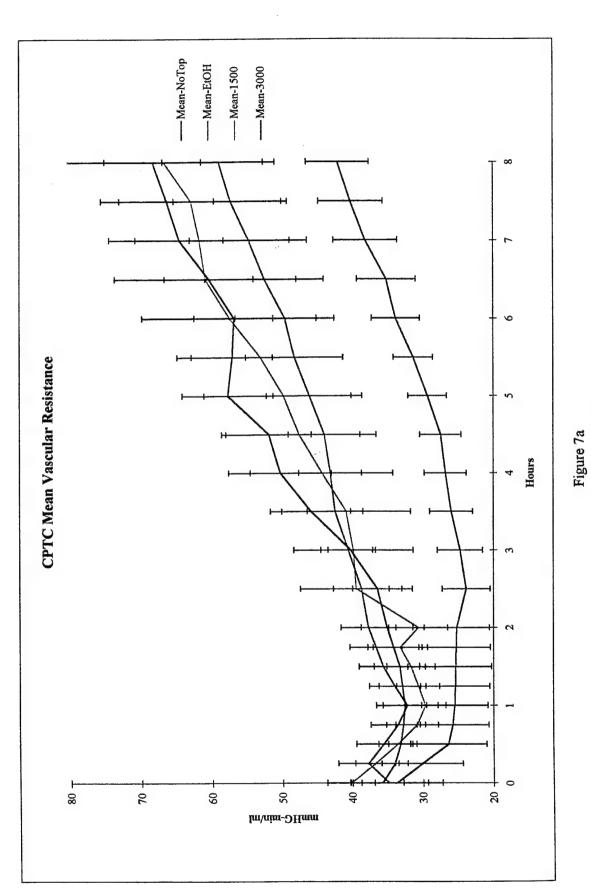
Table 3a lists the VR CV and the results of ANOVA. Note that the CPTC vascular resistance is significantly higher (P = 0.0001) than the Battelle VR CV. This result is confirmed by SAS ANOVA (see Appendix A(2a)). This is due to the increase in VR over time for CPTC flaps, and the lack of this increase in Battelle flaps. Table 3b lists the VR regression R^2 measures and the ANOVA results. The means of the R^2 for CPTC is significantly closer to 1 than is the Battelle R^2 , suggesting a better fit to the linear regression analysis for CPTC flaps. This emphasizes the inconsistency of the flow rates seen in the Battelle data, which makes its use as a parameter of toxicologic effect problematic.

There is one consistent hypothesis that may explain the abnormal VR profiles seen in the control Battelle IPPSFs (and thus the treated ones). We know that there is a certain amount of time required for VR to reach an equilibrium which is associated with a concomitant swelling of the flap. We have had problems in the past when the Stomahesive templates were applied *prior* to this swelling since constriction results. This is a deviation from the CPTC protocol and may be a significant problem.



CPTC Individual Vascular Resistance

Adjustments were made in the catheter position in IPPSFs 1836 and 1837 to allow a drop in pressure

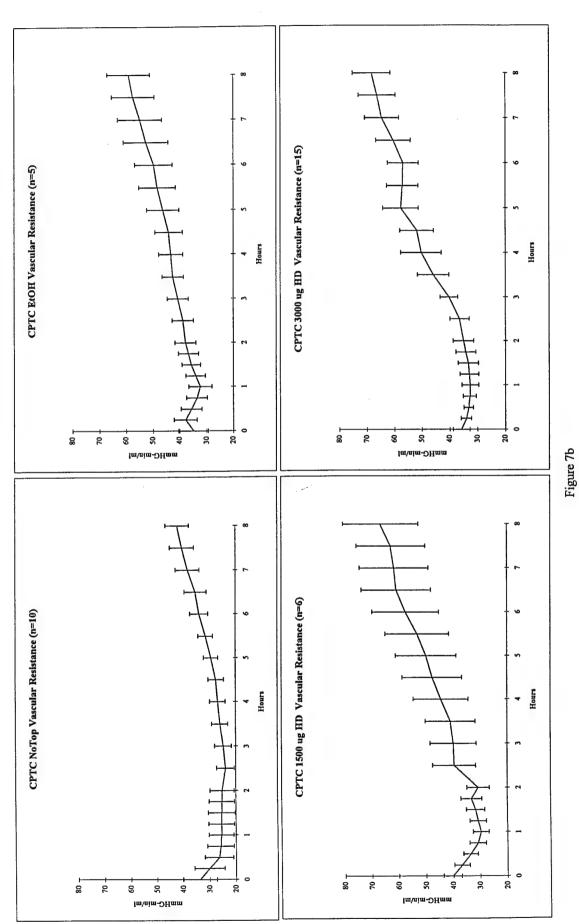


CPTC Mean Vascular Resistance

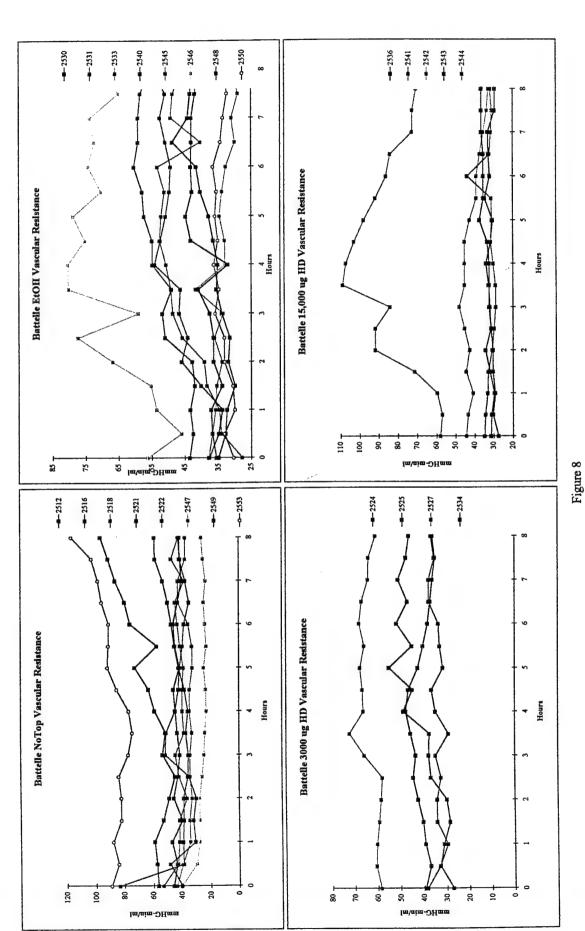
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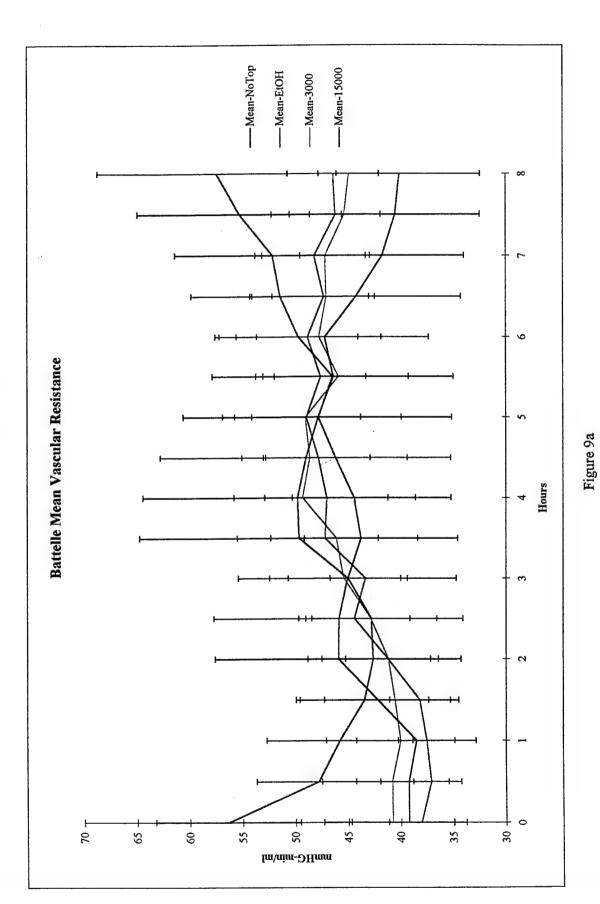
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CPTC Mean Vascular Resistance

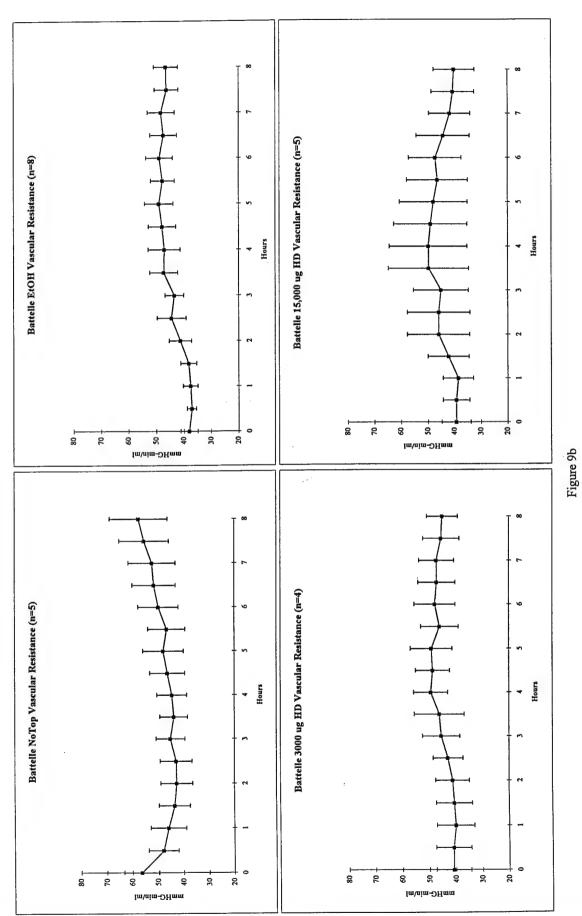


Battelle Individual Vascular Resistance



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Battelle Mean Vascular Resistance



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Battelle Mean Vascular Resistance

Table 3a VASCULAR RESISTANCE

CPTC vs Battelle Vascular Resistance Coefficient of Variance

Analysis of Variance

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	CofV	0.0630
CPTC	DOSE	O MoTon 0.0630
	IPPSF#	295
	CofV	0.0125
Battelle	DOSE	P MoTon 00125
	IPPSF#	2521

CofV	0.0639	0.0466	0.0621	0.0911	0.0752	0.0678	0.0546	0.0800	0.0100	0.0245	0.0576	0.0079	0.0427	0.0508	0.0596	0.0195	0.0638				0.0473	0.0078	0.0580	0.0618	0.0734	0.0424	0.1288	0.0602	0.0727	0.0798	0.1058	0.0847	0.0736	0.0601	0.00	0.1733	0.0841	9800.0	0.0702	0.0522	0.0835	0.0851	0.0608	0.0532	0.0675	0.0059
DOSE	C-NoTop			C-ETOH	C-ETOH	CETOH	C-ETOH	C-ETOH						C3000	3000	3000	C3000			C1500	C1500	C1500	C1500	C1500	C1500																					
IPPSF#	563	565	1246	1374	1375	1376	1377	1378	2082	2083			1737	1738	1739	1744	1755						1745	1747	1749	1750	1751	1752	1761	1768	1769	1828	1829	1834	1836	1837			1741	1742	1743	1746	1748	1754		
CofV	0.0125	0.0227	0.0390	0.0394	0.0287						0.0285	0.0051	0.0348	0.0315	0.0223	0.0238	0.0412	0.0373	0.0340	0.0149	0.0300	0.0031	0.0529	0.0190	0.0159	0.0235											0.0279	0.0085	0.0121	0.0257	0.0268	0.0216	0.0490		0.0270	0.0061
DOSE	B-NoTop	B-NoTop	B-NoTop	B-NoTop	B-NoTop								B-EtOH			B3000	B3000	B3000	B3000													B15000	B15000	B15000	B15000	B15000										
IPPSF#	2521	2522		2549	2553						MEAN	SEM	2530	2531	2533	2540	2545	2546	2548	2550	MEAN	SEM	2524	2525	2527	2534											MEAN	SEM	2536	2541	2542	2543	2544		MEAN	SEM

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SUMMARY	Cultura, unigno, actor					
Groups	T-Grouping	Count	Sum	Average	Variance	
B-NoTop	ບ	5	0.1423	0.0285	0.00013	
B-EtOH	ບ	∞	0.2398	0.0300	0.00008	
B3000	ບ	4	0.1114	0.0279	0.00029	
B15000	ບ	5	0.1352	0.0270	0.00018	
C-NoTop	В	10	0.5758	0.0576	0.00062	
C-ETOH	BC	5	0.2364	0.0473	0.00031	
C1500	ΑB	9	0.4050	0.0675	0.00021	
C3000	٧	15	1.2618	0.0841	0.00112	
ANOVA						
Source of Variation	SS	fр	SW	F	P-value	F crit
Between Groups	0.0293	7	0.0042	7.9945	0.0001	2.1992
Within Groups	0.0262	20	0.0005			
Total	0.0555	57				

CPTC vs Battelle

Groups T-Grouping Count Sum Average Battelle B 22 0.6287 0.0286 CPTC A 36 2.4791 0.0689 ANOVA	Average 1 0.0286
B 22 0.6287 A 36 2.4791	0.0286
A 36 2.4791	00000
ANOVA	١
Source of Variation SS df MS F	
Between Groups 0.0222 1 0.0222 37.260	0.0222 37.2605 0.0001
Within Groups 0.0333 56 0.0006	90000

Table 3b VASCULAR RESISTANCE

CPTC vs Battelle Vascular Resistance Regression R2 Measure

CPTC
Battelle

																																													_	_	_
R2	0.8323	0.2423	1.0000	0.7861	0.9050	0.6511	0.9442	0.5381	1.0000	0.9999	0.7899	0.0784	0.8147	0.8723	0.9538	0.0067	0.8714				0.7038	0.1757	0.2369	0.0003	0.5783	0.7384	0.8362	0.9528	0.5842	0.8899	0.7914	0.9188	0.8409	0.8663	0.8352	0.4570	0.0271	0.0309	0.0829	0.8629	0.1124	0.7678	0.9445	0.8628	0.0459	0.5994	0.1663
DOSE	C-NoTop			C-ETOH	C-ETOH	C-ETOH	C-ETOH	C-ETOH						C3000	23000	23000	3053			C1500	C1500	C1500	C1500	C1500	C1500																						
IPPSF#	563	565	1246	1374	1375	1376	1377	1378	2082	2083	MEAN	SEM	1737	1738	1739	1744	1755				MEAN	SEM	1745	1747	1749	1750	1751	1752	1761	1768	1769	1828	1829	1834	1835	1820	1637	MEAN	SEM	1741	1742	1743	1746	1748	1754	MEAN	SEM
۳,	145	318	963	333	287						0.2089	0.0946	0.7507	0.8183	0.5338	0.5160	0.4787	0.3185	0.7451	0.2026	0.5455	0.0769	0.7377	0.0911	0.2371	0.1105												1.5	0.1514	0.0065	0.0000	0.5597	0.8841	0.0671		0.3035	0.1787
R ²	0.1445				0.4587						0.20	0.0			0.5	0.5			0.7	5	0.5	0.0	0.7	0.0	0.2	0.1											١	7.0	9							03	0.1
DOSE	B-NOTOP	B-NOTOP	B-NOTOP	B-NOTOP	B-NOTOP								B-EtOH			B3000	B3000	B3000	B3000														B15000	B15000	B15000	B15000	B15000										
IPPSF#	2521	2522	2547	2549	2553						MEAN	SEM	2530	2531	2533	2540	2545	2546	2548	2550	MEAN	SEM	2524	2525	2527	2534												MEAN	SEM	2536	2541	2542	2543	2544		MEAN	SEM

Analysis of Variance

All Groups

2022.0	Aņ	Anova: Single Factor	Factor			
Groups	T-Grouping	Count	Sum	Average	Variance	
B-NOTOP	O	5	1.0447	0.2089	0.0448	
B-EtOH	ABC	00	4.3636	0.5455	0.0473	
B3000	BC	4	1.1763	0.2941	0.0917	
B15000	BC	\$	1.5174	0.3035	0.1597	
C-NoTop	A	10	7.8990	0.7899	0.0615	
C-ETOH	¥	2	3.5188	0.7038	0.1543	
C1500	ΑB	9	3.5962	0.5994	0.1660	
C3000	AB	15	9.5536	0.6369	0.1030	
ANOVA						
Source of Variation	SS	df	SJW	F	P-value	Forit
Between Groups	1.9590	7	0.2799	2.8750	0.0133	2.1992
Within Groups	4.8672	20	0.0973			
Total	6.8262	27				

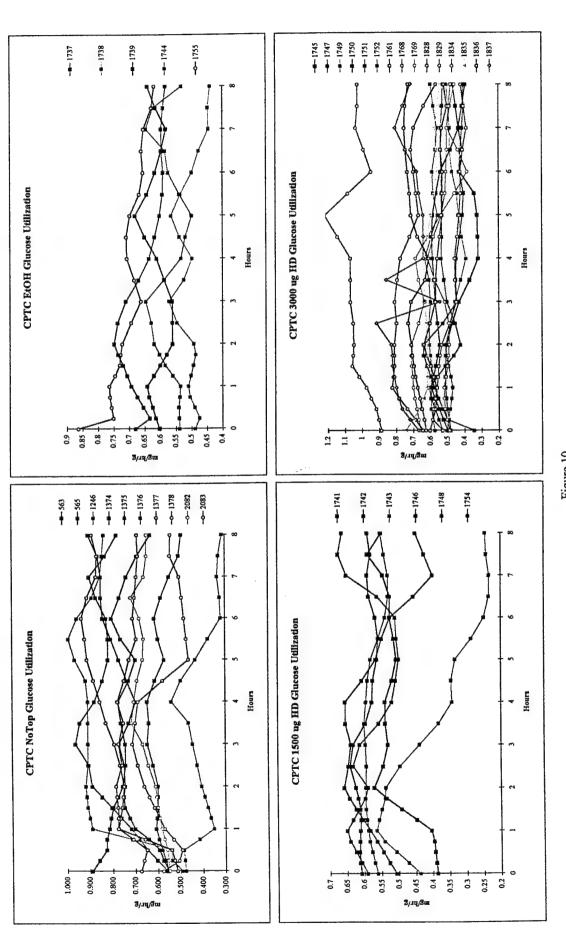
CPTC vs Battelle

	An	Anova: Single Factor	Factor			
SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Average Variance	
Battelle	В	22	8.1021	0.3683	0.0879	
CPTC	¥	36	24.568	0.6824	0.1038	
ANOVA						
Source of Variation	SS	ď	SW	F	P-value	F crit
Between Groups	1.3477		1.3477	13.7757	0.0005	4.0130
Within Groups	5.4785	26	0.0978			
Total	6.8262	57				

Glucose Utilization:

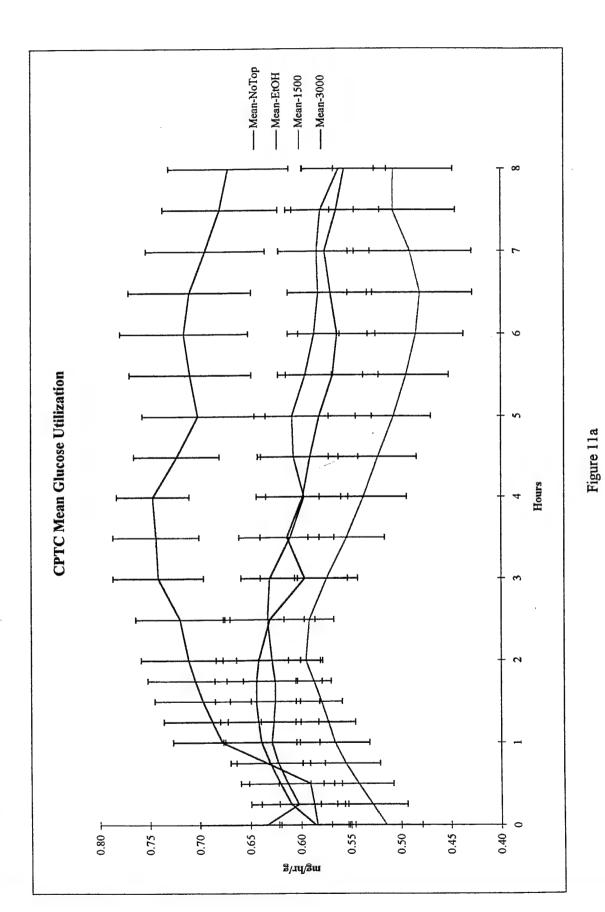
Figures 10 and 11 depict glucose utilization (GU) for CPTC and Figures 12 and 13 for Battelle skin flaps. The most significant comparison is the decreasing GU in Battelle control and EtOH skin flaps. This is best compared by looking at individual flaps due to the inherent flap-to-flap variability. Control CPTC GU profiles usually peak at 1 hour and then remain flat. We previously attributed this initial burst to lactate washout which allows glycolysis to occur. With Battelle flaps, there is a uniform decrease at 3 hours in all treatments. Control flaps should remain flat. This is also seen in Figures 11b and 13b. Because of the difference in control profiles, it is very difficult to interpret treated flaps since one is essentially looking at two models. Consistent with the abnormal VR profiles and unstable flow rates of the control preparations, this pattern of decreasing GU suggests a loss of viability. This defect carries over all treatment groups.

Table 4 lists the GU CV and the results of ANOVA. In all cases, Battelle CV for GU is greater than CPTC indicating increased inter-individual variability, a finding seen with the other parameters.



1. **

Figure 10 CPTC Glucose Utilization



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CPTC Glucose Utilization

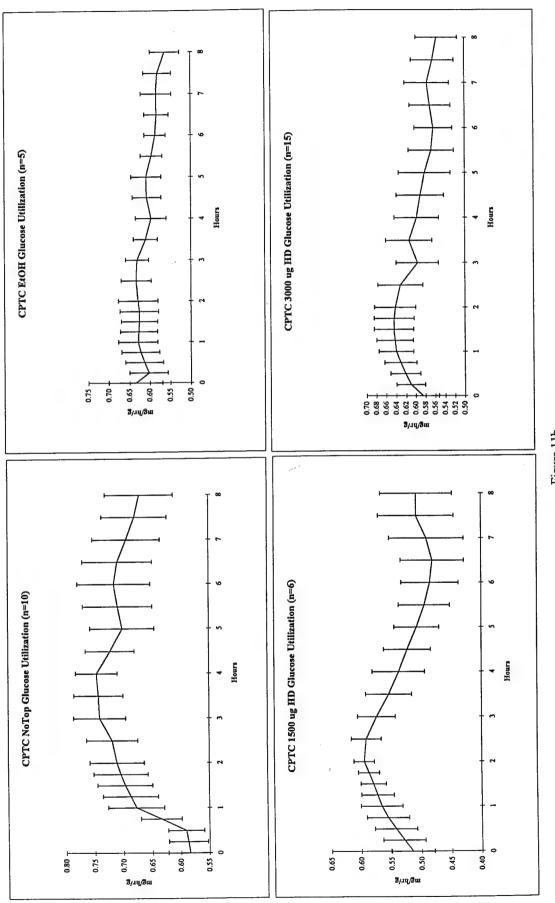
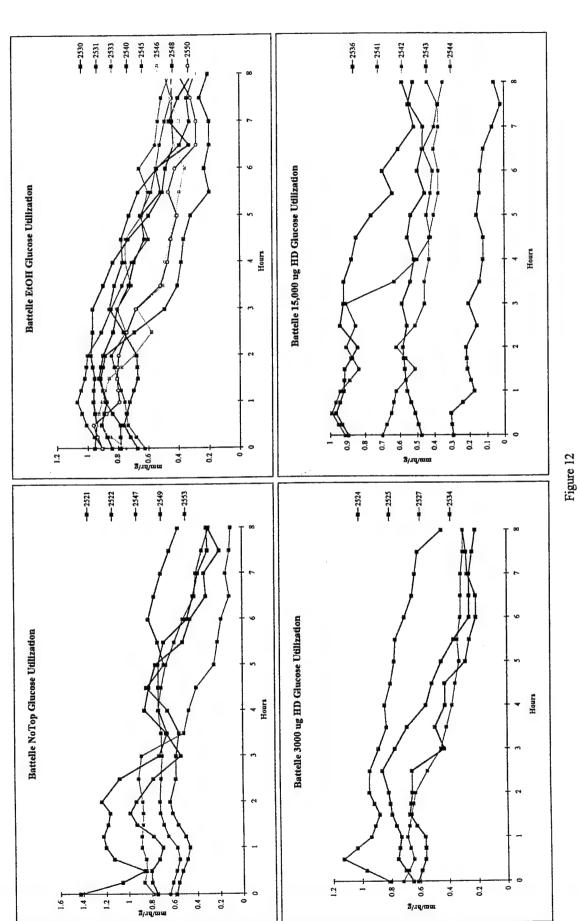


Figure 11b CPTC Glucose Utilization



Battelle Individual Glucose Utilization

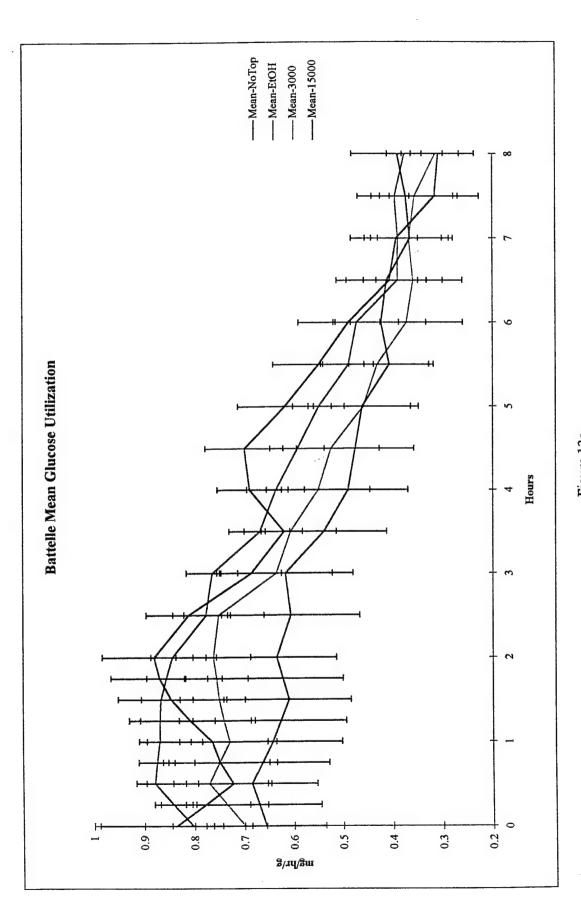
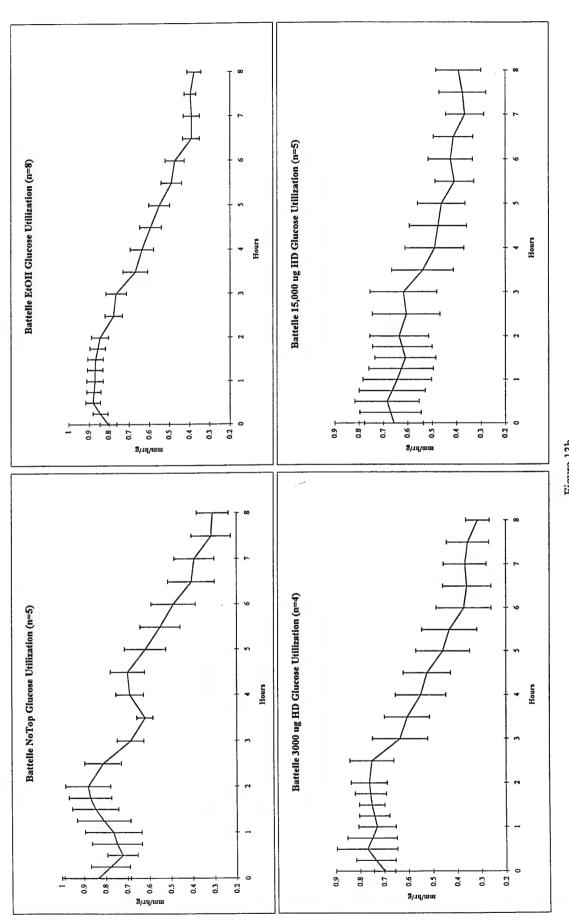


Figure 13a

Battelle Mean Glucose Utilization



Battelle Mean Glucose Utilization Figure 13b

Table 4 GLUCOSE UTILIZATION

Analysis of Variance

All Groups

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	CofV	0.0279	0.0295	0.0361	0.0168	0.0149	0.0375	0.0360	0.0310	0.0186	0.0133	0.0262	0.0030	00100
CPTC	DOSE	C-NoTop			TACHE									
	IPPSF#	563	565	1246	1374	1375	1376	1377	1378	2082	2083			1999
	CofV	0.0760	0.0368	0.1273	0.0891	0.0489						0.0756	0.0159	0000
Battelle	DOSE	B-NoTop	B-NoTop	B-NoTop	B-NoTop	B-NoTop								T TO TE
	IPPSF#	2521	2522	2547	2549	2553						MEAN	SEM	0030

CofV	0.0279	0.0295	0.0361	0.0168	0.0149	0.0375	0.0360	0.0310	0.0186	0.0133	0.0262	0.0030	0.0188	0.0158	0.0115	0.0169	0.0175				0.0161	0.0013
DOSE	C-NoTop			C-ETOH	C-ETOH	C-ETOH	C-ETOH	C-ETOH														
IPPSF#	563	\$65	1246	1374	1375	1376	1377	1378	2082	2083			1737	1738	1739	1744	1755					
CofV	09200	0.0368	0.1273	0.0891	0.0489						0.0756	0.0159	0.0642	0.1146	0.0348	0.0639	0.0648	0.0731	0.0566	0.0813	0.0691	0.0081
DOSE	B-NoTop	B-NoTop	B-NoTop	B-NoTop	B-NoTop								B-EtOH									
IPPSF#	2521	2522	2547	2549	2553						MEAN	SEM	2530	2531	2533	2540	2545	2546	2548	2550	MEAN	SEM

9	4	Anova: Single Factor	de Factor			
SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Variance	
B-NoTop	A	5	0.3782	0.0756	0.00127	
B-EtOH	¥	00	0.5531	0.0691	0.00052	
B3000	A	4	0.2784	9690'0	0.00038	
B15000	Ą	S	0.2837	0.0567	0.00098	
C-NoTop	В	10	0.2616	0.0262	0.00009	
C-ETOH	В	S	0.0805	0.0161	0.00001	
C1500	В	9	0.1654	0.0276	0.00046	
C3000	В	15	0.3287	0.0219	0.00010	
ANOVA						
Source of Variation	SS	ſp	SW	F	P-value	Forit
Between Groups	0.0287	7	0.0041	11.1403	0.0001	2.1992
Within Groups	0.0184	20	0.0004			
1	0.0470	5				
Lotal	0.0470	2/				

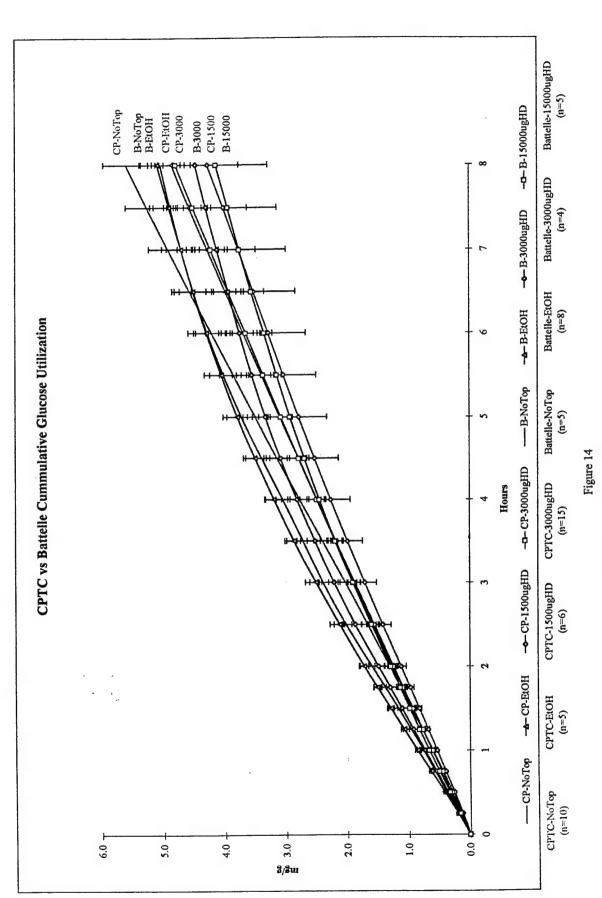
CPTC vs Battelle

	•	Anova: Single Factor	gle Factor			
SUMMARY						
Groups	T-Grouping	Count	Sum	Average	Variance	
Battelle	¥	22	1.4934	0.0679	0.00070	
CPTC	В	36	0.8362	0.0232	0.00015	
ANOVA						
Source of Variation	SS	др	SW	R	P-value	Forit
Between Groups	0.0272	-	0.0272	77.0152	0.0001	4.0130
Within Groups	0.0198	26	0.0004			
Total	0.0470	57				

				SUMMARY	Groups	B-NoTop	B-EtOH	B3000	B15000	C-NoTop	C-ETOH	C1500	C3000		ANONA	Source of Varia	Mish:	within Grou	Total									SUMMAR	Groups	Battelle	CPTC	ANOINA	Source of Vario	Between Grou	Within Group		Total								
	CofV	0.0279	0.0361	0.0168	0.0149	0.0375	0.0360	0.0310	0.0186	0.0133	0.0262	0.0030	0.0188	0.0158	0.0115	0.0169	6.010	-		0.0161	0.0013	0.0351	0.0178	0.0153	0.0197	0.0403	0.0063	0.0139	0.0305	0.0394	0.0217	0.0169	07100	0.0136	0.0265	0.0219	0.0026	0.0084	0.0313	0.0670	0.0287	0.0209	0.0091	0.0276	0,000
CPTC	DOSE	C-NoTop			C-ETOH	C-ETOH	CELOH	CETOH	HOIE-S					C3000	C3000	3000	03000	C3000	C3000			C1500	C1500	C1500	C1500	C1500	C1300																		
	IPPSF#	563	1246	1374	1375	1376	1377	1378	2082	2083			1737	1738	1739	1744	66/1					1745	1747	1749	1750	1751	1752	1761	1768	1769	1828	1829	1835	1836	1837			1741	1742	1743	1746	1748	1/34		
	CofV	0.0760	0.1273	0.0891	0.0489						0.0756	0.0159	0.0642	0.1146	0.0348	0.0639	0.0048	0.0566	0.0813	0.0691	0.0081	0.0783	0.0416	0.0727	0.0858											9690.0	0.0097	0.0174	0.0982	0.0498	0.0417	0.0766		0.0567	21.00
Battelle	DOSE	B-NoTop	B-NoTop	B-NoTop	B-NoTop	•							B-EtOH	B-EtOH	B-EICH	B-EtOH	B-610H	R-E-OH	B-EtOH			B3000	B3000	B3000	B3000													B15000	B15000	B15000	B15000	B15000			
	IPPSF#	2521	2547	2549	2553						MEAN	SEM	2530	2531	2533	2540	2545	2548	2550	MEAN	SEM	2524	2525	2527	2534											MEAN	SEM	2536	2541	2542	2543	2544		MEAN	7

Cumulative Glucose Utilization:

Figure 14 gives the clearest indication of the differences between CPTC and Battelle flaps. The majority of our published analyses utilize cumulative glucose utilization (CGU) as a biomarker of toxicity. In <u>all</u> of our previous work, CGU is linear and thus can be compared by slopes. In Figure 14, all of Battelle CGUs are not linear after about 3-3.5 hours where they plateau. This is clearly seen in Table 5 where the slopes from 0-3.5 and 4-8 hours are compared. This should not occur in control flaps. What is particularly significant is that this shape also carries over onto treatments, suggesting that the flaps are loosing viability after 3 hours making interpretation of compound effect impossible. In short, after 3 hours the flaps become "flops".



CPTC vs Battelle Cummulative Glucose Utilization

Table 5

CPTC vs Battelle Cummulative Glucose Utilization Slopes (0-3.5 hours vs 4-8 hours)

B-15000ugHD	0.011	0.166	0.335	0.504	0.667	0.826	0.980	1.134	1.292	1.602	1.907	2.196	0.627	0.028	2.453	2.695	2.929	3.146	3.354	3.563	3.758	3.942	4.133	0.418	0.823
B-3000ugHD	0.012	0.179	0.368	0.558	0.743	0.927	1.113	1.301	1.491	1.869	2.216	2.526	0.731	0.012	2.815	3.084	3.329	3.552	3.753	3.936	4.117	4.298	4.465	0.407	1.265
B-EtOH	0.013	0.206	0.421	0.640	0.858	1.075	1.292	1.508	1.720	2.126	2.511	2.869	0.829	0.026	3.195	3.502	3.787	4.047	4.287	4.503	4.698	4.894	5.087	0.467	1.418
B-NoTop	0.014	0.202	0.390	0.573	0.763	0.959	1.166	1.380	1.599	2.022	2.396	2.722	0.792	-0.005	3.049	3.396	3.725	4.016	4.276	4.500	4.699	4.876	5.033	0.494	1.213
CP-3000ugHD	0.010	0.149	0.303	0.460	0.619	0.779	0.940	1.101	1.261	1.580	1.887	2.189	0.629	-0.004	2.492	2.789	3.082	3.370	3.653	3.936	4.223	4.508	4.788	0.573	0.211
CP-1500ugHD	600.0	0.130	0.264	0.402	0.542	0.684	0.828	0.974	1.122	1.419	1.710	1.992	0.573	-0.019	2.265	2.530	2.788	3.038	3.283	3.525	3.768	4.017	4.271	0.498	0.290
CP-EtOH	0.011	0.155	0.307	0.461	0.618	0.775	0.931	1.088	1.245	1.560	1.876	2.186	0.625	-0.003	2.488	2.789	3.093	3.394	3.690	3.982	4.274	4.565	4.850	0.591	0.136
CP-NoTop	0.010	0.146	0.294	0.447	0.611	0.781	0.954	1.129	1.306	1.664	2.029	2.400	0.688	-0.051	2.773	3.140	3.496	3.849	4.205	4.561	4.912	5.256	5.593	0.706	-0.036
Hours	0	0.25	0.5	0.75	_	1.25	1.5	1.75	7	2.5	n	3.5	Slope	intercept	4	4.5	\$	5.5	9	6.5	7	7.5	8	Slope	intercept



Table 6 Histology Scores

				- 1		нізт	OLOGY				
TASK				FLAP	MICRO-	DARK	RBCs in	DERMAL	GROSS		
PHASE	DATE	IPPSF#	ANIMAL#	ORIGIN	VESICLES	BASAL	VESSELS	INFLAM	BLISTERS	DOSE	SELECTION
I	1-Feb	2501	95-263-3	R	0	0	0	1	PRE-D	NoTop	no pressure
I	1-Feb	2502	95-263-3	L					NONE	NoTop	no pressure
I	2-Feb	2503	95-18-3	R	0	0	0	0	NONE	NoTop	hi pressure
I	2-Feb	2504	95-18-3	L						aborted	integrity
I	8-Feb	2505	95-263-4	R	0	0	0	0	PRE-D	EtOH	hi pressure
I	8-Feb	2506	95-263-4	L	0	0	0	1	NONE	EtOH	hi pressure
I	9-Feb	2507	95-258-1	R	0	0	0	0	POST-D	NoTop	hi pressure
I	9-Feb	2508	95-258-1	L	0	0	0	0	POST-D	NoTop	hi pressure
I	15-Feb	2509	95-21-2	R	1	0	0	0	POST-D	NoTop	hi pressure
I	15-Feb	2510	95-21-2	L	1	0	0	0	POST-D	NoTop	hi pressure
I	16-Feb	2511	95-22-1	R	0	0	0	0	NONE	NoTop	hi pressure
I	16-Feb	2512	95-22-1	L	0	0	0	0	NONE	NoTop	hi pressure
I	22-Feb	2513	95-21-3	R	1	0	1	1	NONE	NoTop	RBC's
I	22-Feb	2514	95-21-3	L	1	0	1	0	NONE	NoTop	RBC's
I	23-Feb	2515	95-22-2	R	0	0	1	1	NONE	NoTop	RBC's
I	23-Feb	2516	95-22-2	L	0	0	0	0	NONE	NoTop	hi pressure
I	1-Mar	2517	95-24-4	R	0	0	1	0	NONE	NoTop	hi pressure
I	1-Mar	2518	95-24-4	L	0	0	0	0	NONE	NoTop	hi pressure
I	7-Mar	2519	95-24-3							aborted	pig died
I	8-Mar	2520	95-24-5							aborted	pig died
I	16-Mar	2521	95-24-1	R	0	0	0	0	NONE	NoTop	SELECTED
I	16-Mar	2522	95-24-1	L	0	0	0	0	NONE	NoTop	SELECTED
П	22-Mar	2523	95-201-11	R	1	1	1	0	NONE	3000 ug HD	RBC's
п	22-Mar	2524	95-201-11	L	1	1	0	0	NONE	3000 ug HD	SELECTED
п	23-Mar	2525	95-202-7	R	1	1	0	0	NONE	3000 ug HD	SELECTED
П	23-Mar	2526	95-202-7	L	0	1	1	0	PRE-D	EtOH	RBC's
п	29-Mar	2527	95-206-6	R	1	1	0	1	NONE	3000 ug HD	SELECTED
п	29-Mar	2528	95-206-6	L	0	0	1	0		NoTop	catheter out
П	30-Mar	2529	95-205-6	R	1	1	11	0	POST-D	3000 ug HD	RBC's
п	30-Mar	2530	95-205-6	L	0	1	0	0	NONE	EtOH	SELECTED
п	5-Apr	2531	95-22-4	R	1	1	0	0	NONE	EtOH	SELECTED
п	5-Apr	2532	95-22-4	L	11	1	1	0	PRE-D	EtOH	RBC's
II	6-Apr	2533	95-207-6	R	0	0	0	0	NONE	EtOH	SELECTED
П	6-Apr	2534	95-207-6	L	0	0	0	0	PRE-D	3000 ug HD	SELECTED
п	12-Apr	2535	95-1-4	R						NoTop	stopped
п	12-Apr	2536	95-1-4	L	1	1	0	1	PRE-D	15000 ug HD	SELECTED
П	13-Apr	2537	95-205-7	R	0	1	1	1	NONE	15000 ug HD	RBC's
П	13-Apr	2538	95-205-7	L	4	0	1	0	PRE-D	EtOH	RBC's
П	19-Apr	2539	95-208-5	R					NONE	NoTop	stopped
П	19-Apr	2540	95-208-5	L	0	1	0	1	NONE	EtOH	SELECTED
П	20-Apr	2541	95-212-7	R	0	1	0	0	NONE	15000 ug HD	SELECTED
П	20-Apr	2542	95-212-7	L	0	1	0	0	NONE	15000 ug HD	SELECTED
п	26-Apr	2543	95-214-11	R	0	0	0	0	NONE	15000 ug HD	SELECTED
n	26-Apr	2544	95-214-11	L	0	0	0	0	NONE	15000 ug HD	SELECTED
п	27-Apr	2545	95-209-4	R	3	1	0	0	NONE	EtOH	SELECTED
П	27-Apr	2546	95-209-4	L	1	1	0	0	NONE	EtOH	SELECTED
П	3-May	2547	95-223-9	R	0	0.5	0	1	NONE	NoTop	SELECTED
П	3-May	2548	95-223-9	L	0	0	0	1	NONE	EtOH	SELECTED
П	4-May	2549	95-221-5	R	1	1	0	0	NONE	NoTop	SELECTED
П	4-May	2550	95-221-5	L	0	0	0	0	NONE	EtOH	SELECTED
П	10-May	2551	95-220-7	R					integrity	aborted	integrity
П	10-May	2552	95-220-7	L					integrity	aborted	integrity
П	11-May	2553	95-225-6	R	0	0	0	0	NONE	NoTop	SELECTED
П	11-May	2554	95-225-6	L	1	1	1	0	NONE	EtOH	RBC's

Table 6b Histology Scores--Sorted by Selected IPPSFs

TASK	
PHASE DATE IPPSF# ANIMAL # ORIGIN VESICLES BASAL VESSELS INFLAM BLISTERS DOSE	
Harden	SELECTION
II 3-May 2547 95-223-9 R 0 0.5 0 1 NONE NoTop I 16-Mar 2521 95-24-1 R 0 0 0 0 NONE NoTop I 16-Mar 2522 95-24-1 L 0 0 0 0 NONE NoTop I 11-May 2553 95-225-6 R 0 0 0 0 NONE NoTop II 27-Apr 2545 95-209-4 R 3 1 0 0 NONE EtOH II 5-Apr 2531 95-22-4 R 1 1 0 0 NONE EtOH II 27-Apr 2546 95-209-4 L 1 1 0 0 NONE EtOH II 30-Mar 2530 95-205-6 L 0 1 0 0 NONE EtOH II 19-Apr 2540 95-208-5 L 0 1 0 0 NONE EtOH II 6-Apr 2533 95-207-6 R 0 0 0 0 NONE EtOH II 3-May 2548 95-223-9 L 0 0 0 0 NONE EtOH II 3-May 2548 95-223-9 L 0 0 0 0 NONE EtOH II 22-Mar 2524 95-201-11 L 1 1 0 0 NONE 3000 ug HD II 22-Mar 2525 95-202-7 R 1 1 0 0 NONE 3000 ug HD II 29-Mar 2527 95-206-6 R 1 1 0 1 PRE-D 3000 ug HD II 12-Apr 2536 95-1-4 L 1 1 0 1 PRE-D 15000 ug HD II 12-Apr 2536 95-1-4 L 1 1 0 1 PRE-D 15000 ug HD II 12-Apr 2536 95-1-4 L 1 1 0 1 PRE-D 15000 ug HD II 12-Apr 2536 95-1-4 L 1 1 0 1 PRE-D 15000 ug HD II 12-Apr 2536 95-1-4 L 1 1 0 1 PRE-D 15000 ug HD III 12-Apr 2536 95-1-4 L 1 1 0 1 PRE-D 15000 ug HD III 12-Apr 2536 95-1-4 L 1 1 1 0 1 PRE-D 15000 ug HD III 12-Apr 2536 95-1-4 L 1 1 1 0 1 PRE-D 15000 ug HD III 12-Apr 2536 95-1-4 L 1 1 1 0 1 PRE-D 15000 ug HD III 12-Apr 2536 95-1-4 L 1 1 1 0 1 PRE-D 15000 ug HD III 12-Apr 2536 95-1-4 L 1 1 1 0 1 PRE-D 15000 ug HD	SELECTED
I 16-Mar 2521 95-24-1 R 0 0 0 0 NONE NoTop I 16-Mar 2522 95-24-1 L 0 0 0 0 NONE NoTop II 11-May 2553 95-225-6 R 0 0 0 0 NONE NoTop II 27-Apr 2545 95-209-4 R 3 1 0 0 NONE EtOH II 27-Apr 2546 95-209-4 L 1 1 0 0 NONE EtOH II 27-Apr 2546 95-209-4 L 1 1 0 0 NONE EtOH II 30-Mar 2530 95-205-6 L 0 1 0 0 NONE EtOH II 19-Apr 2540 95-208-5 L 0 1 0 1 NONE EtOH II 6-A	SELECTED
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H	SELECTED
H	SELECTED
1	SELECTED
II 23-Mar 2525 95-202-7 R 1 1 0 0 NONE 3000 ug HD	SELECTED
П 29-Mar 2527 95-206-6 R 1 1 0 1 NONE 3000 ug HD П 6-Apr 2534 95-207-6 L 0 0 0 0 PRE-D 3000 ug HD П 12-Apr 2536 95-1-4 L 1 1 0 1 PRE-D 15000 ug HD	SELECTED
П 6-Арг 2534 95-207-6 L 0 0 0 0 PRE-D 3000 ug HD П 12-Арг 2536 95-1-4 L 1 1 0 1 PRE-D 15000 ug HD	SELECTED
II 12-Apr 2536 95-1-4 L 1 1 0 1 PRE-D 15000 ug HD	SELECTED
II 12 14 2000 2011 2	SELECTED
T 20 Am 2541 05 212.7 P 0 I 0 0 NONE 15000 ug HD	SELECTED
H 20 Hpt 25 H	SELECTED
II 20-Apr 2542 95-212-7 L 0 1 0 0 NONE 15000 ug HD	SELECTED
II 26-Apr 2543 95-214-11 R 0 0 0 0 NONE 15000 ug HD	SELECTED
II 26-Apr 2544 95-214-11 L 0 0 0 0 NONE 15000 ug HD	SELECTED
I 22-Feb 2513 95-21-3 R 1 0 1 1 NONE NoTop	RBC's
I 22-Feb 2514 95-21-3 L I 0 1 0 NONE NoTop	RBC's RBC's
I 23-Feb 2515 95-22-2 R 0 0 1 1 NONE NoTop	RBC's
II 25-Mai 2520 75 202-7	RBC's
n stip 2552 still to the stip	RBC's
II 15-rpt 2550 75 265 7	RBC's
11 11-1711, 2554 75 225 0 2	RBC's
II DE ITAL	RBC's
A STORY AGON THE	RBC's
1 101	catheter out
II 29-Mar 2528 95-206-6 L 0 0 1 0 Nolop I 2-Feb 2503 95-18-3 R 0 0 0 NONE NoTop	hi pressure
I 9-Feb 2507 95-258-1 R 0 0 0 POST-D NoTop	hi pressure
I 9-Feb 2508 95-258-1 L 0 0 0 POST-D NoTop	hi pressure
I 15-Feb 2509 95-21-2 R 1 0 0 POST-D NoTop	hi pressure
I 15-Feb 2510 95-21-2 L 1 0 0 POST-D NoTop	hi pressure
I 16-Feb 2511 95-22-1 R 0 0 0 0 NONE NoTop	hi pressure
I 16-Feb 2512 95-22-1 L 0 0 0 0 NONE NoTop	hi pressure
I 23-Feb 2516 95-22-2 L 0 0 0 0 NONE NoTop	hi pressure
I 1-Mar 2517 95-24-4 R 0 0 1 0 NONE NoTop	hi pressure
I 1-Mar 2518 95-24-4 L 0 0 0 0 NONE NoTop	hi pressure
I 8-Feb 2505 95-263-4 R 0 0 0 0 PRE-D EtOH	hi pressure
I 8-Feb 2506 95-263-4 L 0 0 0 1 NONE EtOH	hi pressure
I 1-Feb 2501 95-263-3 R 0 0 0 1 PRE-D NoTop	no pressure
I 1-Feb 2502 95-263-3 L NONE NoTop	no pressure
I 2-Feb 2504 95-18-3 L aborted	integrity
II 10-May 2551 95-220-7 R integrity aborted	integrity
II 10-May 2552 95-220-7 L integrity aborted	integrity
I 7-Mar 2519 95-24-3 aborted	pig died
I 8-Mar 2520 95-24-5 aborted	pig died
II 12-Apr 2535 95-1-4 R NoTop	stopped
II 19-Apr 2539 95-208-5 R NONE NoTop	stopped

Histology and Length of Surgery:

Table 6 is a list of the histology score for the IPPSF samples we received from Battelle. Table 6b has been sorted by selected flaps. The most visible discrepancy seen from CPTC histology slides was the presence of red blood cells. It is almost impossible to do any further interpretation at this level because based upon the previous data presented, all flaps were not viable and thus histological lesions are meaningless.

Table 7 is a list of the time the pigs were under halothane anesthesia. The average time for halothane exposure at CPTC for Stage I is 2.75 hours-on at about 9:00 AM, off at about 10:45. The average for Stage II is 0.75 hours for the left flap and 1.00 for the right flap-on at about 7:30 AM, off at about 8:15 and 8:30 AM, respectively. These times are significantly shorter than the Battelle surgery times. Numerous factors associated with prolonged surgery could be affecting these results. These include prolonged anesthesia, hypoxia and other subtle physiological changes that would affect flap viability.

The following is the average halothane times sorted by surgeon. We realize that this is not a fair representation; for example, if SB was training the other surgeons his times would naturally be longer.

Surgeon	Stage I	Stage II
CL	4.18 hr	1.21 hr
DLT	4.16 hr	0.89 hr
JT	3.96 hr	0.94 hr
LB	3.96 hr	1.00 hr
PHK	3.69 hr	0.73 hr
SB	3.87 hr	1.07 hr
THS	3.29 hr	1.57 hr

Appendix B:

Appendix B is plots of GU, VR, and flow rate for each individual IPPSF. Note the inconsistant flow rates, and the tendency for glucose utilization to drop after about 3 hours.

Table 7
Battelle Halothane Exposure Time

					Stage I H	alothane			Stage II I	Ialothane	
2506	95-263-4	L	2/6/95					8:35 AM	9:20 AM	0:45	0.75
2507	95-258-1	R	2/7/95	9:20 AM	12:45 PM	3:25	3.42	8:20 AM	9:35 AM	1:15	1.25
2508	95-258-1	L	2/7/95					8:20 AM	9:23 AM	1:03	1.05
2509	95-21-2	R	2/13/95	8:32 AM	12:47 PM	4:15	4.25	8:41 AM	10:18 AM	1:37	1.62
2510	95-21-2	L	2/13/95	0.02.12.1				8:41 AM	9:38 AM	0:57	0.95
2511	95-22-1	R	2/14/95	8:32 AM	12:17 PM	3:45	3.75	8:25 AM	9:54 AM	1:29	1.48
2512	95-22-1	L	2/14/95	0.5211	12127 2112			8:25 AM	9:13 AM	0:48	0.8
2513	95-21-3	R	2/20/95	8:23 AM	1:14 PM	4:51	4.85	8:25 AM	9:40 AM	1:15	1.25
2514	95-21-3	L	2/20/95	0.23 PHVI	1.14 1.14	,.51	1.02	8:25 AM	9:15 AM	0:50	0.83
2515	95-22-2	R	2/21/95	8:20 AM	12:24 PM	4:04	4.07	8:20 AM	9:42 AM	1:22	1.37
2516	95-22-2	L	2/21/95	6.20 AIVI	12.24 1 141	4.04	4.07	8:20 AM	8:50 AM	0:30	0.5
2517	95-22-2	R	2/27/95	8:30 AM	12:07 PM	3:37	3.62	8:20 AM	9:21 AM	1:01	1.02
		-		8.30 ALVI	12.07 FW	3.57	3.02	8:20 AM	8:55 AM	0:35	0.58
2518	95-24-4	L	2/27/95	9.21 AM	nia diad	pig died	pig died	pig died		pig died	pig died
2519	95-24-3	\vdash	3/7/95	8:31 AM	pig died pig died	pig died	pig died	pig died pig died	pig died	pig died pig died	pig died
2520	95-24-5	<u></u>	3/13/95	8:25 AM		5:02	5.03	9:12 AM	pig died	1:15	1.25
2521	95-24-1	R	3/14/95	8:52 AM	1:54 PM	3:02	3.03	9:12 AM	10:27 AM 9:57 AM	0:45	0.75
2522	95-24-1	L	3/14/95	0.00.437	1.04 D) (4.51	4.05				0.73
2523	95-201-11	R	3/20/95	8:33 AM	1:24 PM	4:51	4.85	7:30 AM	8:13 AM	0:43	
2524	95-201-11	L	3/20/95	0.00.434	10.56 D) (4.26	4.6	7:30 AM	7:54 AM	0:24	0.4
2525	95-202-7	R	3/21/95	8:20 AM	12:56 PM	4:36	4.6	7:07 AM	9:15 AM	2:08	2.13
2526	95-202-7	L	3/21/95	2 2 2 1 2 5	1.05.73.6	4.00	. 4.47	7:07 AM	8:55 AM	1:48	1.8
2527	95-206-6	R	3/27/95	8:39 AM	1:07 PM	4:28	4.47	8:31 AM	9:31 AM	1:00	0.55
2528	95-206-6	L	3/27/95					8:31 AM	9:04 AM	0:33	0.55
2529	95-205-6	R	3/28/95	8:35 AM	12:29 PM	3:54	3.9	8:27 AM	9:42 AM	1:15	1.25
2530	95-205-6	L	3/28/95					8:27 AM	8:57 AM	0:30	0.5
2531	95-22-4	R	4/3/95	8:35 AM	11:14 AM	2:39	2.65	8:34 AM	10:10 AM	1:36	1.6
2532	95-22-4	L	4/3/95					8:34 AM	9:50 AM	1:16	1.27
2533	95-207-6	R	4/4/95	8:54 AM	1:11 PM	4:17	4.28	8:35 AM	9:40 AM	1:05	1.08
2534	95-207-6	L	4/4/95					8:35 AM	9:15 AM	0:40	0.67
2535	95-1-4	R	4/10/95	8:20 AM	12:44 PM	4:24	4.4	8:15 AM	9:14 AM	0:59	0.98
2536	95-1-4	L	4/10/95					8:15 AM	8:53 AM	0:38	0.63
2537	95-205-7	R	4/11/95	8:29 AM	12:59 PM	4:30	4.5	8:28 AM	9:35 AM	1:07	1.12
2538	95-205-7	L	4/11/95					8:28 AM	9:09 AM	0:41	0.68
2539	95-208-5	R	4/17/95	8:43 AM	1:34 PM	4:51	4.85	8:27 AM	9:44 AM	1:17	1.28
2540	95-208-5	L	4/17/95					8:27 AM	8:59 AM	0:32	0.53
2541	95-212-7	R	4/18/95	8:43 AM	11:59 AM	3:16	3.27	8:17 AM	9:15 AM	0:58	0.97
2542	95-212-7	L	4/18/95					8:17 AM	8:57 AM	0:40	0.67
2543	95-214-11	R	4/24/95	8:42 AM	12:00 PM	3:18	3.3	8:14 AM	9:27 AM	1:13	1.22
2544	95-214-11	L	4/24/95					8:14 AM	9:01 AM	0:47	0.78
2545	95-209-4	R	4/25/95	8:19 AM	10:50 AM	2:31	2.52	8:12 AM	9:14 AM	1:02	1.03
2546	95-209-4	L	4/25/95					8:12 AM	8:47 AM	0:35	0.58
2547	95-223-9	R	5/1/95	8:44 AM	11:54 AM	3:10	3.17	8:24 AM	9:25 AM	1:01	1.02
2548	95-223-9	L	5/1/95					8:24 AM	9:00 AM	0:36	0.6
2549	95-221-5	R	5/2/95	8:27 AM	11:36 AM	3:09	3.15	8:18 AM	9:06 AM	0:48	0.8
2550	95-221-5	L	5/2/95					8:18 AM	8:48 AM	0:30	0.5
2551	95-220-7	R	5/8/95	8:26 AM	11:40 AM	3:14	3.23	8:31 AM	pig died	pig died	pig died
2552	95-220-7	L	5/8/95					8:31 AM	pig died	pig died	pig died
2553	95-225-6	R	5/9/95	8:23 AM	11:44 AM	3:21	3.35	8:09 AM	9:39 AM	1:30	1.5
2554	95-225-6	L	5/9/95					8:09 AM	9:03 AM	0:54	0.9

Suggestions Upon Continuation:

Check the pump and flowmeter. The Monostat Cassette Pump may be delivering an inconsistent flow of perfusion. At CPTC, we calibrate our flowmeters over a period of about one hour for seven areas along the flowmeter. Perhaps a calibration over a single minute is not long enough. The Harvard Apparatus Model 1203 peristaltic pump is the pump used at CPTC. These retail for about \$2,850 (1991 price). CPTC charges \$1000 for each IPPSF experiment. If you must throw out 3 experiments due to an unreliable flowrate, you have paid for the pump. Surges in the perfusate flows may cause a loss of viability through shunting through other vessels to leave red blood cells and dead skin.

The problem may not be in the pump, but in the flowmeter. Vascular resistance is pressure divided by flow rate and glucose utilization is the arterial minus the venous glucose reading times the flow rate. If the inconsistency is in the flowmeter, this will have an impact on vascular resistance and glucose utilization. Since these are two important measures in determining HD affect, it is important to get consistent flowmeter readings, either through acquiring a different pump system or more careful study of the flowmeter.

The problem with inconsistent flow rates may also be with the power supply. At CPTC we recently discarded a UPS that produced an inconsistent power level. We did not notice the changes until we attached an electric fan. There was an audible variation in the flow rate of the fan--surges and slow-downs. Perhaps an in-line voltmeter between the outlet and the pump would confirm or eliminate this concern.

RBC's were seen in about 25% of the tissue samples sent to CPTC. This indicates incomplete perfusion of the skin flap. It is interesting that 11 of the 12 IPPSFs with RBC's were flushed with heparinized Dulbecco's PBS prior to perfusion, 1 of the 12 with heparinized saline. This may suggest that the viscosity of the Dulbecco's PBS may be too great for complete flushing of the capillaries in the IPPSF.

We at CPTC are concerned by the number of IPPSF surgeons at Battelle. We generally limit our number of surgeons to three. This ensures that each individual has the opportunity to develop the experience necessary for proper cannulation and tissue handling. The length of both Stage I and II surgeries are too long and could significantly affect flap viability. Too many cooks will spoil the stew.

Executive Summary:

The attached report is a sequential analysis of all of the isolated perfused porcine skin flap (IPPSF) data submitted by Battelle for comparison with NCSU results. We went through a methodical study of all flaps and selected those IPPSFs which we determined were the best that Battelle produced. The selection criteria is fully documented.

We then proceeded to analyze the primary parameters of IPPSF perfusion and markers of sulfur mustard action in both Battelle and CPTC flaps. These included perfusate flow rate, vascular resistance, normal and cumulative glucose utilization and histology. The conclusion from this analysis is that the control Battelle flaps are highly variable and apparently lose viability at three to four hours after the start of infusion.

We are not sure as to why this is occurring since in all of our experience, we have not seen similar IPPSF profiles. However, there are some indications of potential problems.

Potential Problems:

- 1.) Too many surgeons precludes any one surgical team from actually getting sufficient experience to master the IPPSF procedure. This is reflected in the prolonged surgery times. Long surgery is associated with numerous problems including longer exposure to anesthetic gases, hypoxia and numerous physiological adaptations. Additionally, inexperienced surgeons tend to produce more subtle tissue damage which is associated with release of cytokines and other inflammatory mediators. Cannulation is not optimal nor reproducible. It is possible that this inexperience coupled with the use of a viscous flushing solution, may have contributed to the abnormal histology seen on many of the earlier flaps. We suggest that the number of surgeons be reduced so that sufficient experience is gained to decrease the length of surgery.
- 2.) There are indications that a major source of variability is related to either maintenance of perfusate flow rate or measurement of flow rate. The concerns outlined in the report should be investigated.
- 3.) One hypothesis for the elevated vascular resistance seen with the flaps relates to when the dosing template is placed on the flap. We hypothesize that placing it on before flap swelling has reached an equilibrium may cause constriction and vascular abnormalities. We have had similar problems on some protocols before. We suggest that surety regulations be modified such that they can be placed on prior to dosing rather than prior to perfusion.
- 4.) It is imperative that we have the ability to analyze control data before treatments begin. In order to accomplish this, we need physiological data and histology submitted as soon after the experiments as possible if we are to be of any help. Also, as with any organization, we require some turn around time to analyze this data.

Suggestion for Action:

In an effort to aid Battelle in learning this technology, we suggest that you grant this contract a no-cost extension through June 30, 1996. We would reallocate our funding to be able to provide feedback for you through this time period. We suggest you identify your "best" surgeons, address the above problems and do control IPPSFs until their profiles match those of the CPTC. If this cannot be accomplished, then it is possible that subtle differences in perfusion chambers may be to blame. If this is the case, then we would suggest that you send your team back to NCSU and see what happens if you use our chambers and facilities. We hope that this analysis proves useful and look forward to continued cooperation and hope that the "art" of IPPSF perfusion can be mastered by your staff.

APPENDIX A(1) Flow Rate Coefficient of Variance

The SAS System
14:56 Wednesday, August 2, 1995

Analysis of Variance Procedure Class Level Information

Class	Levels	Values
DOSE	8	B-EtOH B-NoTop B15000 B3000 C-ETOH C-NoTop C1500 C3000
FLOWCV	49	0.004 0.005 0.006 0.007 0.008 0.009 0.0023 0.0025 0.0026 0.0027 0.0029 0.0038 0.0039 0.0044 0.0045 0.0047 0.0048 0.0049 0.0051 0.0053 0.0054 0.0056 0.0057 0.0061 0.0062 0.0063 0.0065 0.0068 0.0069 0.0073 0.0079 0.0082 0.0083 0.0084 0.0086 0.0088 0.0094 0.0095 0.0099 0.0101 0.0102 0.0115 0.0121 0.0132 0.0137 0.0139 0.0176 0.0199 0.0232

Number of observations in data set = 55

Analysis of Variance Procedure

Dependent	Variable:	FLOWCV				
			Sum of	Mean		
Source		DF	Squares	Square	F Value	Pr > F
Model		7	0.00022072	0.00003153	1.99	0.0768
Error		47	0.00074548	0.00001586		
Corrected	Total	54	0.00096619			
	R-	-Square	c.v.	Root MSE	FLO	WCV Mean
	0	.228440	51.99228	0.0039826	0	.0076600
Source		DF	Anova SS	Mean Square	F Value	Pr > F
DOSE		7	0.00022072	0.00003153	1.99	0.0768

Analysis of Variance Procedure

Flow Rate Coefficient of Variance

T tests (LSD) for variable: FLOWCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 47 MSE= 0.000016 Critical Value of T= 2.01 Least Significant Difference= 0.0049 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 5.245902

75- -1

Means with the same letter are not significantly different.

T Gro	uping	Mean	N	DOSE
	A	0.012100	5	В-NоТор
В	A A	0.010025	8	B-EtOH
B B	A A	0.009100	3	B3000
B B	A A	0.008033	3	B15000
B B		0.006780	15	C3000
B B		0.006460	5	С-ЕТОН
B B		0.006390	10	C-NoTop
B B		0.005217	6	C1500

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: FLOWCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 47 MSE= 0.000016 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 5.245902

Number of Means 2 3 4 5 6 7 8 Critical Range .004947 .005203 .005371 .005492 .005585 .005660 .005720

Means with the same letter are not significantly different.

Duncan Grouping		Mean	N	DOSE
	A	0.012100	5	B-NoTop
В	A A	0.010025	8	B-EtOH
B B	A A	0.009100	3	B3000
B B	A A	0.008033	3	B15000
B B	A A	0.006780	15	C3000
В В		0.006460	5	C-ETOH
В В		0.006390	10	C-NoTop
B B		0.005217	6	C1500

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: FLOWCV

77 = 7.

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 47 MSE= 0.000016
Critical Value of Studentized Range= 4.485
Minimum Significant Difference= 0.0078
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 5.245902

Means with the same letter are not significantly different.

Tukey Grouping	Mean	N	DOSE
A	0.012100	5	B-NoTop
A A	0.010025	8	B-EtOH
A A	0.009100	3	B3000
A A	0.008033	3	B15000
A A	0.006780	15	C3000
A A	0.006460	5	С-ЕТОН
A A	0.006390	10	C-NoTop
A A	0.005217	6	C1500

Analysis of Variance Procedure Class Level Information

Class	Levels	Values
SITE	2	Battelle CPTC
FLOWCV	49	0.004 0.005 0.006 0.007 0.008 0.009 0.0023 0.0025 0.0026 0.0027 0.0029 0.0038 0.0039 0.0044 0.0045 0.0047 0.0048 0.0049 0.0051 0.0053 0.0054 0.0056 0.0057 0.0061 0.0062 0.0063 0.0065 0.0068 0.0069 0.0073 0.0079 0.0082 0.0083 0.0084 0.0086 0.0088 0.0094 0.0095 0.0099 0.0101 0.0102 0.0115 0.0121 0.0132 0.0137 0.0139 0.0176 0.0199 0.0232

Number of observations in data set = 55

Analysis of Variance Procedure

Dependent Variable:	FLOWCV				
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	0.00017431	0.00017431	11.67	0.0012
Fricor	53	0.00079188	0.00001494		
Corrected Total	54	0.00096619			
I	R-Square	C.V.	Root MSE	FLO	WCV Mean

0.180414 50.46176 0.0038654 0.0076600

DF Anova SS Mean Square F Value Pr > F

1 0.00017431 0.00017431 11.67 0.0012

Analysis of Variance Procedure

T tests (LSD) for variable: FLOWCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 53 MSE= 0.000015 Critical Value of T= 2.01 Least Significant Difference= 0.0022 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 24.87273

Means with the same letter are not significantly different.

T Grouping	Mean	N	SITE
А	0.010111	19	Battelle
В	0.006367	36	CPTC

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: FLOWCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 53 MSE= 0.000015 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 24.87273

Number of Means 2 Critical Range .002198

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	SITE
A	0.010111	19	Battelle
В	0.006367	36	CPTC

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: FLOWCV

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 53 MSE= 0.000015 Critical Value of Studentized Range= 2.837 Minimum Significant Difference= 0.0022 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 24.87273

Means with the same letter are not significantly different.

Tukey	Grouping		Mean	N	SITE
	A	0.01	10111	19	Battelle
	В	0.00	6367	36	CPTC
OBS	DOSE	SITE	IPPSF	F	LOWCV
12345678901121314516789011223456789011213145178921222222333333333333333333333333333333	C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-ETOH C-ETOH C-ETOH C-ETOH C3000	CPTC CPTC CPTC CPTC CPTC CPTC CPTC CPTC	563 565 1246 1374 1375 1376 1377 1378 2083 1737 1738 1744 1755 1745 1751 1768 1769 1829 1836 1837 1742 1743 1743 1744 1748		.0065 .0039 .0137 .0038 .0048 .0057 .0029 .0088 .0084 .0054 .0040 .0086 .0044 .0051 .0102 .0115 .0090 .0061 .0027 .0176 .0060 .0068 .0070 .0068 .0049 .0062 .0049 .0063 .0047 .0063 .0045 .0045 .0045 .0047 .0063 .0045 .0045 .0047 .0063 .0045 .0045 .0047 .0063 .0045 .0045 .0046 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0047 .0063 .0064 .0049 .0064 .0064 .0064 .0065 .0066
36 37 38	C1500 B-NoTop B-NoTop	CPTC Battelle Battelle	1754 2521 2522	0	.0053 .0139 .0115
39 40 41 42	B-NoTop B-NoTop B-NoTop B-EtOH	Battelle Battelle Battelle Battelle	2547 2549 2553 2530	0	.0083 .0199 .0069

43	B-EtOH	Battelle	2531	0.0056
44	B-EtOH	Battelle	2533	0.0082
45	B-EtOH	Battelle	2540	0.0053
46	B-EtOH	Battelle	2545	0.0053
47	B-EtOH	Battelle	2546	0.0232
48	B-EtOH	Battelle	2548	0.0132
49	B-EtOH	Battelle	2550	0.0095
50	B3000	Battelle	2524	0.0121
51	B3000	Battelle	2525	0.0079
52	B3000	Battelle	2527	0.0073
53	B15000	Battelle	2536	0.0090
54	B15000	Battelle	2541	0.0050
55	B15000	Battelle	2544	0.0101
50 51 52 53 54	B3000 B3000 B3000 B15000 B15000	Battelle Battelle Battelle Battelle Battelle	2524 2525 2527 2536 2541	0.01 0.00 0.00 0.00

APPENDIX A(2a) Vascular Resistance Coefficient of Variance

The SAS System
15:19 Wednesday, August 2, 1995

Analysis of Variance Procedure Class Level Information

Class	Levels	Values
DOSE	8	B-EtOH B-NoTop B15000 B3000 C-ETOH C-NoTop C1500 C3000
VRCV	58	0.01 0.08 0.019 0.034 0.039 0.049 0.058 0.0121 0.0125 0.0149 0.0159 0.0195 0.0216 0.0223 0.0227 0.0235 0.0238 0.0245 0.0257 0.0268 0.0287 0.0315 0.0348 0.0373 0.0394 0.0412 0.0424 0.0427 0.0466 0.0508 0.0522 0.0529 0.0532 0.0546 0.0551 0.0596 0.0602 0.0608 0.0618 0.0621 0.0638 0.0639 0.0678 0.0702 0.0727 0.0734 0.0736 0.0752 0.0798 0.0835 0.0847 0.0851 0.0861 0.0911 0.1058 0.1062 0.1288 0.1733

Number of observations in data set = 58

Analysis of Variance Procedure

Dependent	Variable: VRCV				
		Sum of	Mean		D
source	DF	Squares	Square	F Value	Pr > F
(Model	7	0.02930531	0.00418647	8.00	0.0001
Error	50	0.02616552	0.00052331		
Corrected	Total 57	0.05547083			
	R-Square	c.v.	Root MSE		VRCV Mean
	0.528301	42.69417	0.0228760		0.0535810
7					
Source	DF	Anova SS	Mean Square	F Value	Pr > F
DOSE	7	0.02930531	0.00418647	8.00	0.0001

Analysis of Variance Procedure

Vascular Resistance Coefficient of Variance

T tests (LSD) for variable: VRCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 50 MSE= 0.000523 Critical Value of T= 2.01 Least Significant Difference= 0.0263 WARNING: Cell sizes are not equal.

Harmonic Mean of cell sizes= 6.11465

Means with the same letter are not significantly different.

T Gro	uping	Mean	N	DOSE
	A	0.08413	15	C3000
В	A A	0.06750	6	C1500
B B		0.05758	10	C-NoTop
B B	C	0.04728	5	C-ETOH
	C C	0.02998	8	B-EtOH
	c c	0.02846	5	B-NoTop
	C C	0.02783	4	B3000
	C C	0.02704	5	B15000

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: VRCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 50 MSE= 0.000523 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465

Number of Means 2 3 4 5 6 7 8 Critical Range .02628 .02764 .02853 .02918 .02968 .03008 .03040

Means with the same letter are not significantly different.

Duncan Grou	uping		Mean	N	DOSE
	A		0.08413	15	C3000
B A B A B B D	A		0.06750	6	C1500
		C C C	0.05758	10	C-NoTop
	_		0.04728	5	C-ETOH
	D D	C C	0.02998	8	B-EtOH
	D D		0.02846	5	в-Nотор
	D D D		0.02783	4	B3000
			0.02704	5	B15000

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: VRCV

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 50 MSE= 0.000523
Critical Value of Studentized Range= 4.473
Minimum Significant Difference= 0.0414
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 6.11465

Means with the same letter are not significantly different.

Tukey Grouping		Mean	N	DOSE
	A A	0.08413	15	C3000
B B	A A	0.06750	6	C1500
B B	A A	0.05758	10	C-NoTop
В	A	0.04728	5	С-ЕТОН
B B		0.02998	8	B-EtOH
B B		0.02846	5	B-NoTop
B B		0.02783	4	B3000
B B		0.02704	5	B15000

Analysis of Variance Procedure Class Level Information

Class	Levels	values
SITE	2	Battelle CPTC
VRCV	58	0.01 0.08 0.019 0.034 0.039 0.049 0.058 0.0121 0.0125 0.0149 0.0159 0.0195 0.0216 0.0223 0.0227 0.0235 0.0238 0.0245 0.0257 0.0268 0.0287 0.0315 0.0348 0.0373 0.0394 0.0412 0.0424 0.0427 0.0466 0.0508 0.0522 0.0529 0.0532 0.0546 0.0551 0.0596 0.0602 0.0608 0.0618 0.0621 0.0638 0.0639 0.0678 0.0702 0.0727 0.0734 0.0736 0.0752 0.0798 0.0835 0.0847 0.0851 0.0861 0.0911 0.1058 0.1062 0.1288 0.1733

Number of observations in data set = 58

Analysis of Variance Procedure

Dependent Variable:	: VRCV				
		Sum of	Mean		
Cource	DF	Squares	Square	F Value	Pr > F
•••					
Model	1	0.02216750	0.02216750	37.27	0.0001
7			0 00050450		
Error	56	0.03330333	0.00059470		

Corrected Total	57	0.05547083			
	R-Square	c.V.	Root MSE		VRCV Mean
	0.399625	45.51334	0.0243865		0.0535810
Source	DF	Anova SS	Mean Square	F Value	Pr > F
SITE	1	0.02216750	0.02216750	37.27	0.0001

Analysis of Variance Procedure

T tests (LSD) for variable: VRCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 56 MSE= 0.000595 Critical Value of T= 2.00 Least Significant Difference= 0.0132 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

T Grouping	Mean	N	SITE
A	0.068864	36	CPTC
В	0.028573	22	Battelle

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: VRCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 56 MSE= 0.000595 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Number of Means 2 Critical Range .01322

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	SITE
A	0.068864	36	CPTC
В	0.028573	22	Battelle

Analysis of Variance Procedure

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Tukey's Studentized Range (HSD) Test for variable: VRCV

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 56 MSE= 0.000595
Critical Value of Studentized Range= 2.833
Minimum Significant Difference= 0.0132
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

Tukey	Grouping		Mean	N	SITE
	A		0.068864	36	CPTC
	В		0.028573	22	Battelle
OBS	DOSE	SITE	IPPSF		VRCV
OBS 1234567891112131451671892122342562789313233	C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-NoTop C-ETOH C-ETOH C-ETOH C-ETOH C3000	CPTC CPTC CPTC CPTC CPTC CPTC CPTC CPTC	563 565 1246 1374 1375 1376 1377 1378 2082		.0639 .0466 .0621 .0911 .0752 .0678 .0546 .0800 .0100 .0245 .0427 .0508 .0596 .0195 .0638 .0596 .0195 .0638 .0580 .0195 .0638 .0734 .0424 .1288 .0602 .0727 .0798 .1058 .0736 .0737 .0738 .0736 .0736 .0737 .0738
34 35 36 37	C1500 C1500 C1500 B-NoTop	CPTC CPTC CPTC Batte		(0.0851 0.0608 0.0532 0.0125 0.0227
38	B-NoTop	Batte	lle 2522	,	0.0221

39	B-NoTop	Battelle	2547	0.0390	
40	B-NoTop	Battelle	2549	0.0394	
41	B-NoTop	Battelle	2553	0.0287	
42	B-EtOH	Battelle	2530	0.0348	
43	B-EtOH	Battelle	2531	0.0315	
44	B-EtOH	Battelle	2533	0.0223	
45	B-EtOH	Battelle	2540	0.0238	
46	B-EtOH	Battelle	2545	0.0412	
47	B-EtOH	Battelle	2546	0.0373	
48	B-EtOH	Battelle	2548	0.0340	
49	B-EtOH	Battelle	2550	0.0149	
50	B3000	Battelle	2524	0.0529	
51	B3000	Battelle	2525	0.0190	
52	B3000	Battelle	2527	0.0159	
53	B3000	Battelle	2534	0.0235	
54	B15000	Battelle	2536	0.0121	
55	B15000	Battelle	2541	0.0257	
56	B15000	Battelle	2542	0.0268	
57	B15000	Battelle	2543	0.0216	
58	B15000	Battelle	2544	0.0490	

APPENDIX A(2b) Vascular Resistance Regression R-Square Measure

The SAS System
13:23 Thursday, August 3, 1995

Analysis of Variance Procedure Class Level Information

Class	Levels	Values
DOSE	8	B-EtOH B-NOTOP B15000 B3000 C-ETOH C-NoTop C1500 C3000
VRR2	52	0 1 0.11 0.56 0.89 0.003 0.006 0.007 0.027 0.032 0.046 0.067 0.091 0.112 0.144 0.203 0.237 0.242 0.319 0.406 0.437 0.459 0.479 0.516 0.534 0.538 0.578 0.584 0.651 0.738 0.745 0.751 0.768 0.786 0.791 0.815 0.818 0.832 0.836 0.841 0.855 0.863 0.866 0.871 0.872 0.884 0.905 0.919 0.944 0.945 0.953 0.954

Number of observations in data set = 58

Analysis of Variance Procedure

Dependent	Variable: VRR2	Sum of	Mean		
Source	DF	Squares	Square	F Value	Pr > F
Model	7	1.95930045	0.27990006	2.87	0.0133
Error	50	4.86857618	0.09737152		
Corrected	Total 57	6.82787662			
	R-Square	c.v.	Root MSE		VRR2 Mean
	0.286956	55.40149	0.3120441		0.5632414
Source	DF	Anova SS	Mean Square	F Value	Pr > F
DOSE	7	1.95930045	0.27990006	2.87	0.0133

Analysis of Variance Procedure

Vascular Resistance Regression R-Square Measure

T tests (LSD) for variable: VRR2

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 50 MSE= 0.097372 Critical Value of T= 2.01 Least Significant Difference= 0.3585 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465 Means with the same letter are not significantly different.

T Gro	uping		Mean	N	DOSE
	A		0.7898	10	C-NoTop
	A A		0.7038	5	С-ЕТОН
В	A		0.6368	15	C3000
B B	A A		0.5995	6	C1500
B B	A A	С	0.5456	8	B-EtOH
B B		C	0.3034	5	B15000
B B		C	0.2940	4	B3000
		C	0.2088	5	B-NOTOP

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: VRR2

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 50 MSE= 0.097372 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465

Number of Means 2 3 4 5 6 7 8 Critical Range .3585 .3770 .3892 .3981 .4048 .4103 .4147

Means with the same letter are not significantly different.

Duncan Grou	ping		Mean	N	DOSE
	A		0.7898	10	C-NoTop
	A A		0.7038	5	C-ETOH
В	A A		0.6368	15	C3000
B B	A A	C	0.5995	6	C1500
B B	A A	C	0.5456	8	B-EtOH
B B		C	0.3034	5	B15000
B B		C	0.2940	4	B3000
		C C	0.2088	5	в-потор

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: VRR2

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 50 MSE= 0.097372 Critical Value of Studentized Range= 4.473 Minimum Significant Difference= 0.5644 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465

Means with the same letter are not significantly different.

Tukey Grouping		Mean	N	DOSE
	A	0.7898	10	C-NoTop
В	A A	0.7038	5	С-ЕТОН
B B	A A	0.6368	15	C3000
В	A A	0.5995	6	C1500
В	A	0.5456	8	B-EtOH
B B	A A			
B B	A A	0.3034	5	B15000
B B	A	0.2940	4	B3000
В		0.2088	5	B-NOTOP

Analysis of Variance Procedure Class Level Information

Class	revers	values
SITE	2	Battelle CPTC
VRR2	52	0 1 0.11 0.56 0.89 0.003 0.006 0.007 0.027 0.032 0.046 0.067 0.091 0.112 0.144 0.203 0.237 0.242 0.319 0.406 0.437 0.459 0.479 0.516 0.534 0.538 0.578 0.584 0.651 0.738 0.745 0.751 0.768 0.786 0.791 0.815 0.818 0.832 0.836 0.841 0.855 0.863 0.866 0.871 0.872 0.884 0.905 0.919 0.944 0.945 0.953 0.954

77-7-1--

Number of observations in data set = 58

Analysis of Variance Procedure

Dependent Variab	le: VRR2	- ·			
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1.34734170	1.34734170	13.77	0.0005
Error	56	5.48053492	0.09786669		
Corrected Total	57	6.82787662			
	R-Square	c.v.	Root MSE		VRR2 Mean

	0.197330	55.54218	0.3128365		0.5632414
S. rce	DF	Anova SS	Mean Square	F Value	Pr > F
SITE	1	1.34734170	1.34734170	13.77	0.0005

Analysis of Variance Procedure

T tests (LSD) for variable: VRR2

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

> Alpha= 0.05 df= 56 MSE= 0.097867 Critical Value of T= 2.00 Least Significant Difference= 0.1696 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

T Grouping	Mean	N	SITE
A	0.68239	36	CPTC
В	0.36827	22	Battelle

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: VRR2

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

> Alpha= 0.05 df= 56 MSE= 0.097867 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

> > Number of Means Critical Range .1696

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	SITE
A	0.68239	36	CPTC
В	0.36827	22	Battelle

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: VRR2

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 56 MSE= 0.097867 Critical Value of Studentized Range= 2.833 Minimum Significant Difference= 0.1696 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

Tukey	Grouping		Mean	N	SITE
	A	0	.68239	36	CPTC
	В	0	.36827	22	Battelle
OBS	DOSE	SITE	IPPSF		VRR2
OBS 123456789111213145167189201223425678933123343536	DOSE C-NoTop C-TOH C-ETOH C-ETOH C-ETOH C-ETOH C1500 C1500 C1500 C1500 C1500 C3000	SITE CPTC CPTC CPTC CPTC CPTC CPTC CPTC CP	1PPSF 563 565 1246 1374 1375 1376 1377 1378 2083 1738 1738 1744 1755 1744 1745 1746 1747 1750 1751 1768 1769 1829 1836 1837		VRR2 .832 .242 .000 .786 .905 .651 .944 .538 .000 .815 .872 .907 .871 .863 .112 .768 .945 .8046 .237 .000 .578 .836 .945 .836 .9578 .836 .9578 .836 .9578 .836 .9578 .836 .9578 .836 .9578 .837 .027
37 38 39 40	B-NOTOP B-NOTOP B-NOTOP	Battelle Battelle Battelle Battelle	2522 2547 2549	0	.144 .032 .406
41 42	B-NOTOP B-EtOH	Battelle Battelle			.459 .751

B-EtOH	Battelle	2531	0.818
B-EtOH	Battelle	2533	0.534
B-EtOH	Battelle	2540	0.516
B-EtOH	Battelle	2545	0.479
B-EtOH	Battelle	2546	0.319
B-EtOH	Battelle	2548	0.745
B-EtOH	Battelle	2550	0.203
B3000	Battelle	2524	0.738
B3000	Battelle	2525	0.091
B3000	Battelle	2527	0.237
B3000	Battelle	2534	0.110
B15000	Battelle	2536	0.006
B15000	Battelle	2541	0.000
B15000	Battelle	2542	0.560
B15000	Battelle	2543	0.884
B15000	Battelle	2544	0.067
	B-EtOH B-EtOH B-EtOH B-EtOH B-EtOH B3000 B3000 B3000 B3000 B15000 B15000 B15000	B-EtOH Battelle B3000 Battelle B3000 Battelle B3000 Battelle B3000 Battelle B3000 Battelle B3000 Battelle B15000 Battelle B15000 Battelle B15000 Battelle B15000 Battelle B15000 Battelle	B-EtOH Battelle 2533 B-EtOH Battelle 2540 B-EtOH Battelle 2545 B-EtOH Battelle 2546 B-EtOH Battelle 2548 B-EtOH Battelle 2548 B-EtOH Battelle 2550 B3000 Battelle 2524 B3000 Battelle 2525 B3000 Battelle 2527 B3000 Battelle 2534 B15000 Battelle 2534 B15000 Battelle 2541 B15000 Battelle 2542 B15000 Battelle 2542

APPENDIX A(3) Glucose Utilization Coefficient of Variance

The SAS System
15:22 Wednesday, August 2, 1995

Analysis of Variance Procedure Class Level Information

Class	Levels	Values
DOSE	8	B-EtOH B-NoTop B15000 B3000 C-ETOH C-NoTop C1500 C3000
GUCV	57	0.017 0.031 0.036 0.067 0.076 0.0063 0.0084 0.0091 0.0115 0.0133 0.0136 0.0139 0.0146 0.0149 0.0153 0.0158 0.0168 0.0169 0.0174 0.0175 0.0178 0.0186 0.0188 0.0197 0.0209 0.0217 0.0265 0.0279 0.0287 0.0295 0.0305 0.0313 0.0348 0.0351 0.0361 0.0368 0.0375 0.0394 0.0403 0.0416 0.0417 0.0489 0.0498 0.0566 0.0639 0.0642 0.0648 0.0727 0.0731 0.0766 0.0783 0.0813 0.0858 0.0891 0.0982 0.1146 0.1273

Number of observations in data set = 58

Analysis of Variance Procedure

Dependent	Variable: GUCV				
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	0.02866129	0.00409447	11.13	0.0001
Error	50	0.01838897	0.00036778		
Corrected	Total 57	0.04705025			
	R-Square	c.v.	Root MSE		GUCV Mean
	0.609163	47.74636	0.0191776		0.0401655
Source	DF	Anova SS	Mean Square	F Value	Pr > F
DOSE	7	0.02866129	0.00409447	11.13	0.0001

Analysis of Variance Procedure

Glucose Utilization Coefficient of Variance

T tests (LSD) for variable: GUCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

Alpha= 0.05 df= 50 MSE= 0.000368 Critical Value of T= 2.01 Least Significant Difference= 0.022 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465 Means with the same letter are not significantly different.

T Grouping	Mean	N	DOSE
A	0.07562	5	В-NоТор
A A	0.06960	4	B3000
A A	0.06916	8	B-EtOH
A A	0.05674	5	B15000
В	0.02757	6	C1500
В В	0.02616	10	C-NoTop
В В	0.02191	15	C3000
В	0.01610	5	C-ETOH
В	0.01010	5	CELOII

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: GUCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 50 MSE= 0.000368 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 6.11465

Number of Means 2 3 4 5 6 7 8 Critical Range .02203 .02317 .02392 .02446 .02488 .02521 .02549

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	DOSE
A	0.07562	5	B-NoTop
A A	0.06960	4	B3000
A A	0.06916	8	B-EtOH
A A	0.05674	5	B15000
В	0.02757	6	C1500
В В	0.02616	10	C-NoTop
. В	0.02191	15	C3000
В В	0.01610	5	С-ЕТОН

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: GUCV

NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

Alpha= 0.05 df= 50 MSE= 0.000368
Critical Value of Studentized Range= 4.473
Minimum Significant Difference= 0.0347
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 6.11465

Means with the same letter are not significantly different.

Tukey Group	ping	Mean	N	DOSE
	A	0.07562	5	B-NoTop
	A A	0.06960	4	B3000
	A A	0.06916	8	B-EtOH
В	A A	0.05674	5	B15000
B B	С	0.02757	6	C1500
B B	C C	0.02616	10	C-NoTop
	C C	0.02191	15	C3000
	C C	0.01610	5	С-ЕТОН

Analysis of Variance Procedure Class Level Information

Class	revers	values
SITE	2	Battelle CPTC
GUCV	57	0.017 0.031 0.036 0.067 0.076 0.0063 0.0084 0.0091 0.0115 0.0133 0.0136 0.0139 0.0146 0.0149 0.0153 0.0158 0.0168 0.0169 0.0174 0.0175 0.0178 0.0186 0.0188 0.0197 0.0209 0.0217 0.0265 0.0279 0.0287 0.0295 0.0305 0.0313 0.0348 0.0351 0.0361 0.0368 0.0375 0.0394 0.0403 0.0416 0.0417 0.0489 0.0498 0.0566 0.0639 0.0642 0.0648 0.0727 0.0731 0.0766 0.0783 0.0813 0.0858 0.0891 0.0982 0.1146 0.1273

Number of observations in data set = 58

Analysis of Variance Procedure

Dependent Variabl	Le: GUCV		•		
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	0.02723712	0.02723712	76.98	0.0001
Frror	56	0.01981313	0.00035381		
Corrected Total	57	0.04705025			
b []	R-Square	c.v.	Root MSE		GUCV Mean

	0.578894	46.83054	0.0188097		0.0401655
cce	DF	Anova SS	Mean Square	F Value	Pr > F
SITE	1	0.02723712	0.02723712	76.98	0.0001

Analysis of Variance Procedure

T tests (LSD) for variable: GUCV

NOTE: This test controls the type I comparisonwise error rate not the experimentwise error rate.

> Alpha= 0.05 df= 56 MSE= 0.000354 Critical Value of T= 2.00 Least Significant Difference= 0.0102 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

SITE	N	Mean	T Grouping
Battelle	22	0.067886	A
CPTC	36	0.023225	В

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: GUCV

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

> Alpha= 0.05 df= 56 MSE= 0.000354 WARNING: Cell sizes are not equal. Harmonic Mean of cell sizes= 27.31034

> > Number of Means Critical Range .01020

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	SITE
А	0.067886	22	Battelle
B	0.023225	36	CPTC

Analysis of Variance Procedure

Tukey's Studentized Range (HSD) Test for variable: GUCV

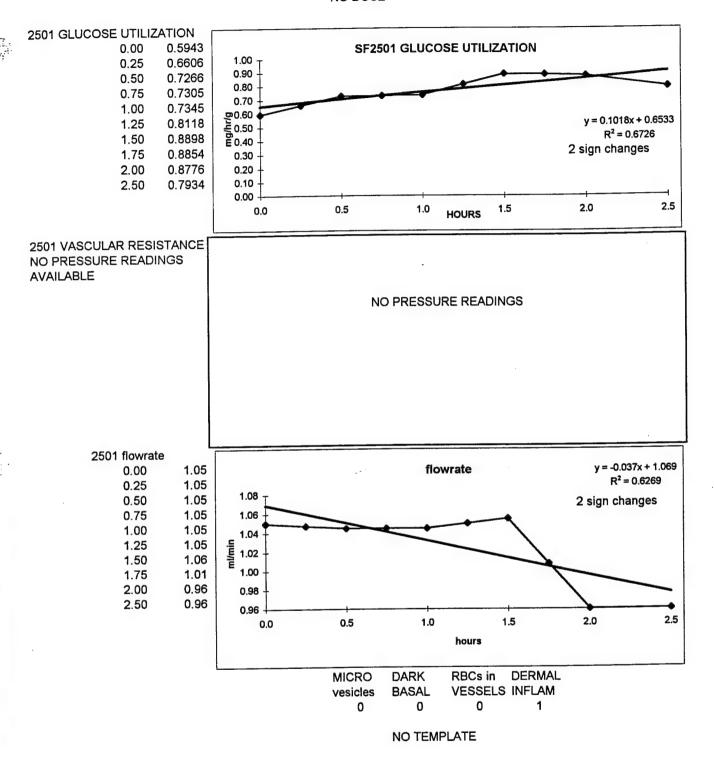
NOTE: This test controls the type I experimentwise error rate, but generally has a higher type II error rate than REGWQ.

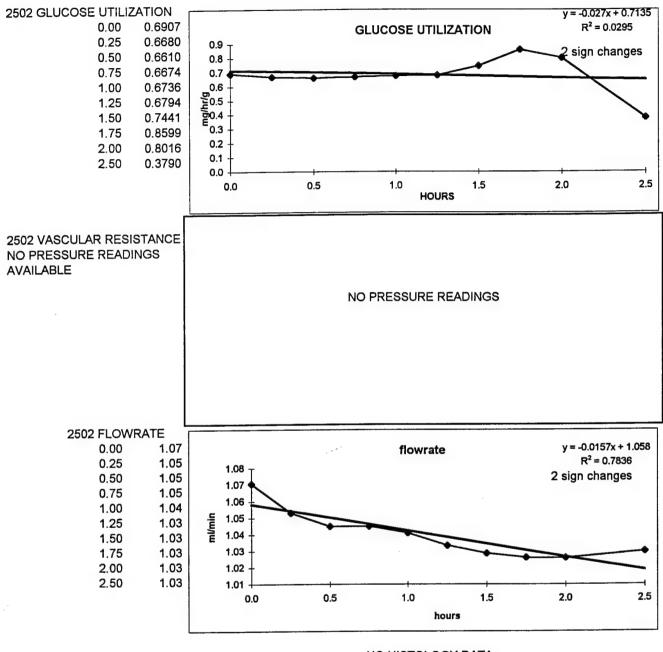
Alpha= 0.05 df= 56 MSE= 0.000354
Critical Value of Studentized Range= 2.833
Minimum Significant Difference= 0.0102
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 27.31034

Means with the same letter are not significantly different.

Tukey	Grouping		Mean	N	SITE
	A		0.067886	22	Battelle
	В		0.023225	36	CPTC
OBS	DOSE	SITE	IPPSF		GUCV
1 2 3 4 5 6 7 8 9 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C-NoTop C-ETOH C-ETOH C-ETOH C-ETOH C3000	CPTC CPTC CPTC CPTC CPTC CPTC CPTC CPTC	563 565 1246 1374 1375 1376 1377 1378 2082 2083 1737 1738 1739 1744 1755 1745 1747 1749 1750 1751 1752 1761 1768 1769 1828 1828 1836 1837 1741 1742 1743 1744 1748 1754 2521 2521 2522		.0279 .0279 .0295 .0361 .0168 .0149 .0375 .0360 .0310 .0186 .0133 .0188 .0158 .0158 .0159 .0175 .0351 .0178 .0153 .0197 .0403 .0197 .0403 .0197 .0403 .0139 .0305 .0394 .0217 .0169 .0146 .0170 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0139 .0146 .0170 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0136 .0139 .0146 .0170 .0136
39 40 41 42	B-NoTop B-NoTop B-NoTop B-EtOH	Batte Batte Batte	elle 2549 elle 2553	C	0.0891 0.0489 0.0642

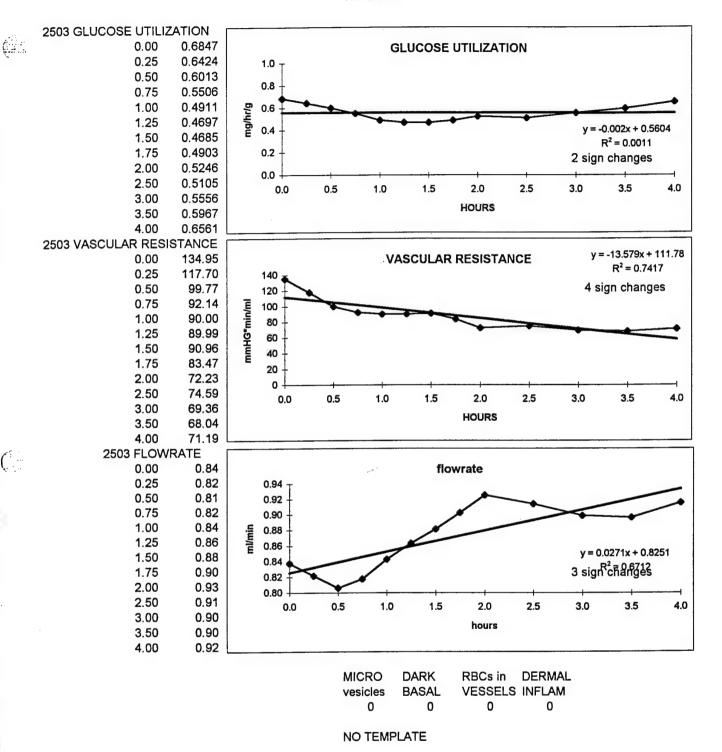
43	B-EtOH	Battelle	2531	0.1146
44	B-EtOH	Battelle	2533	0.0348
45	B-EtOH	Battelle	2540	0.0639
46	B-EtOH	Battelle	2545	0.0648
47	B-EtOH	Battelle	2546	0.0731
48	B-EtOH	Battelle	2548	0.0566
49	B-EtOH	Battelle	2550	0.0813
50	B3000	Battelle	2524	0.0783
51	B3000	Battelle	2525	0.0416
52	B3000	Battelle	2527	0.0727
53	B3000	Battelle	2534	0.0858
54	B15000	Battelle	2536	0.0174
55	B15000	Battelle	2541	0.0982
56	B15000	Battelle	2542	0.0498
57	B15000	Battelle	2543	0.0417
58	B15000	Battelle	2544	0.0766



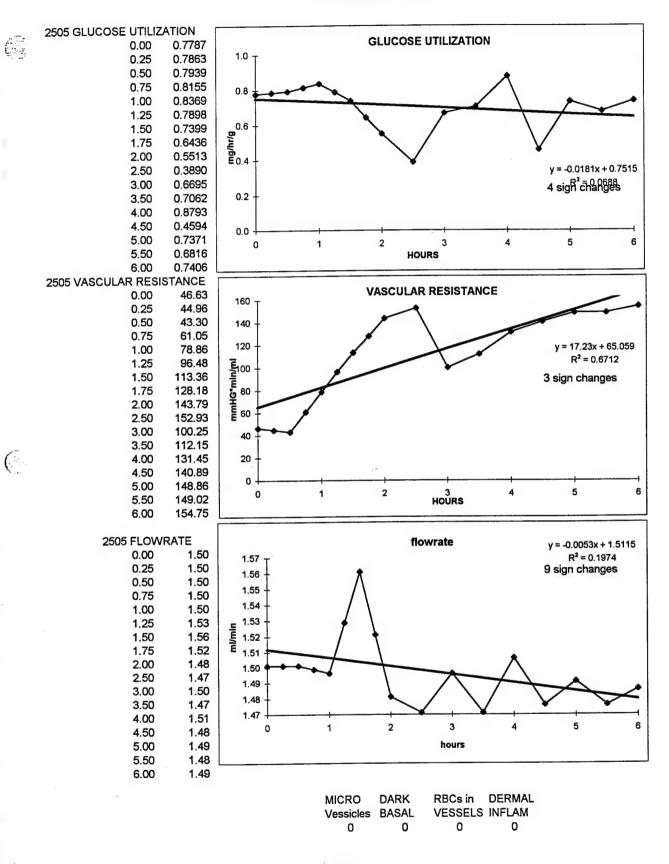


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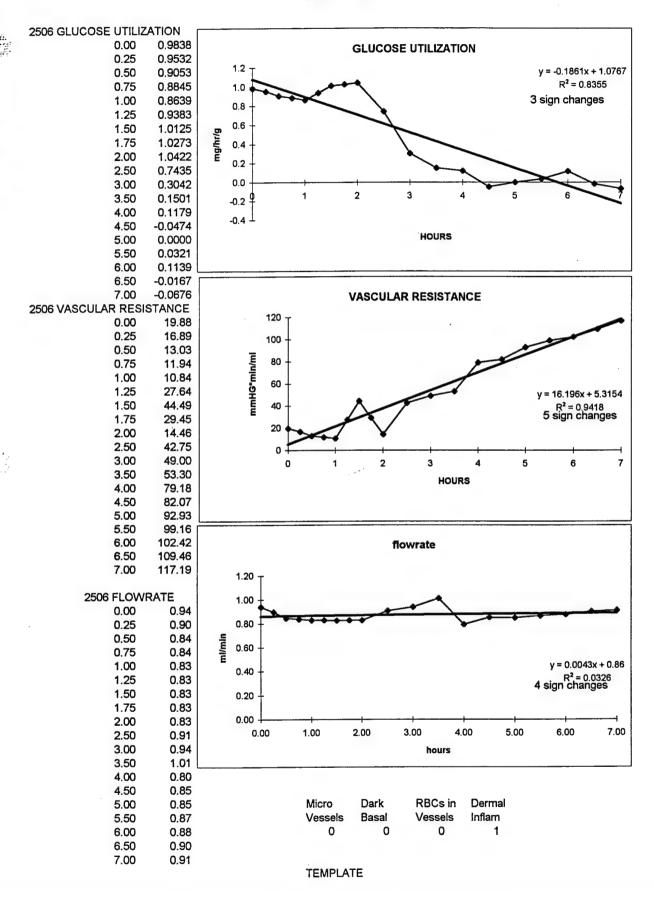


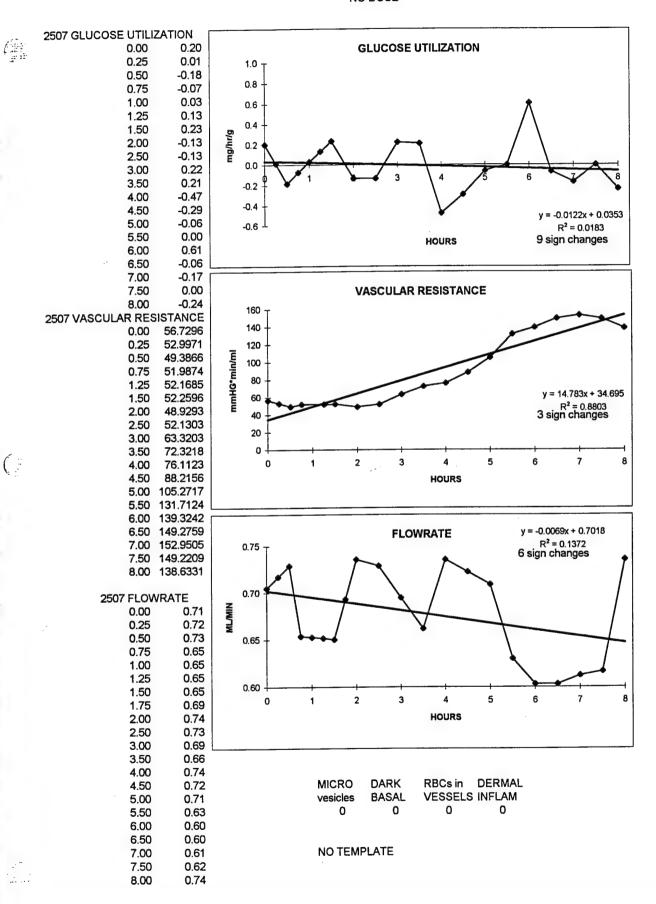
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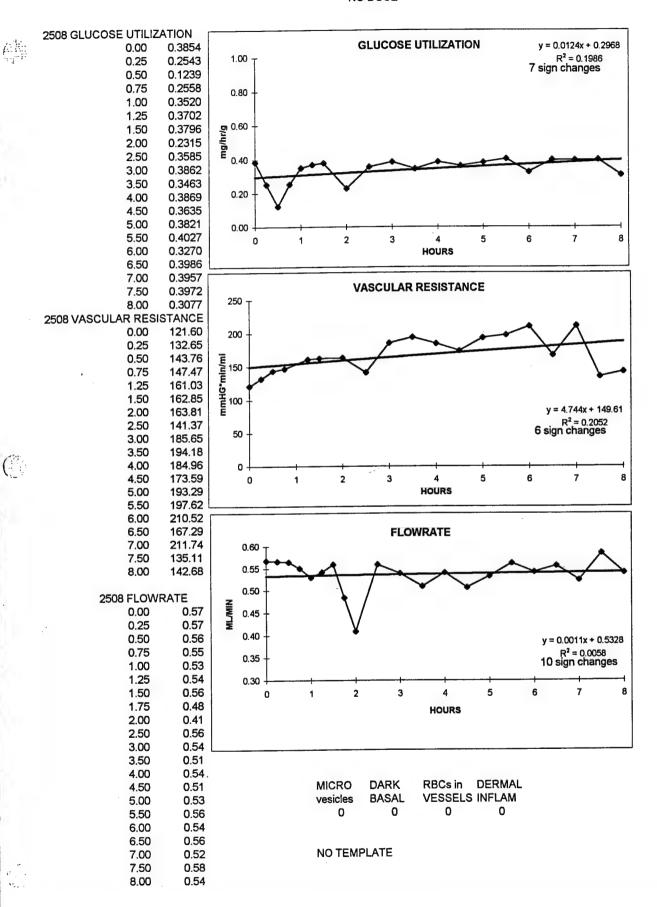
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2506PLOT.XLS DOSE = 300 UL ETOH

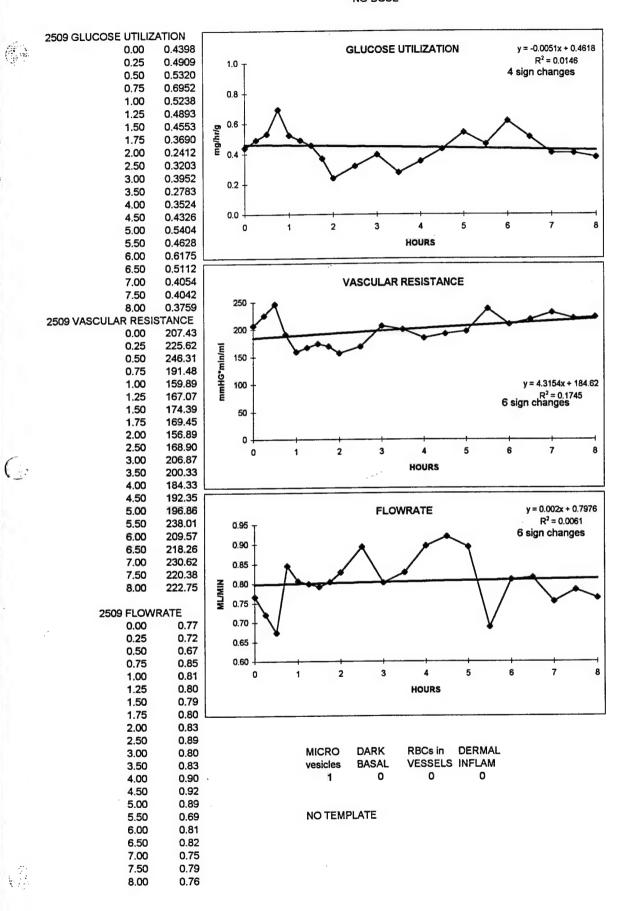




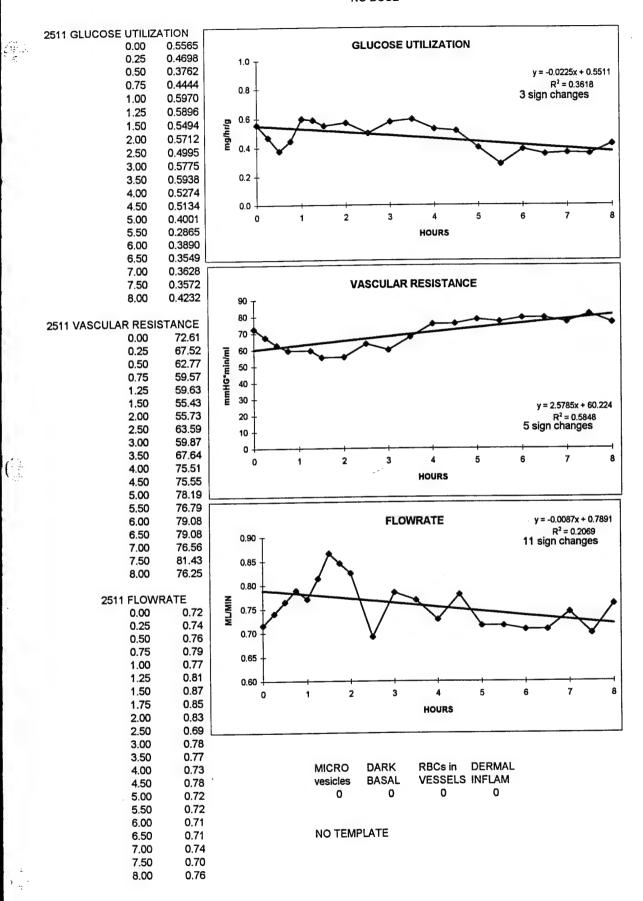
2508PLOT.XLS NO DOSE



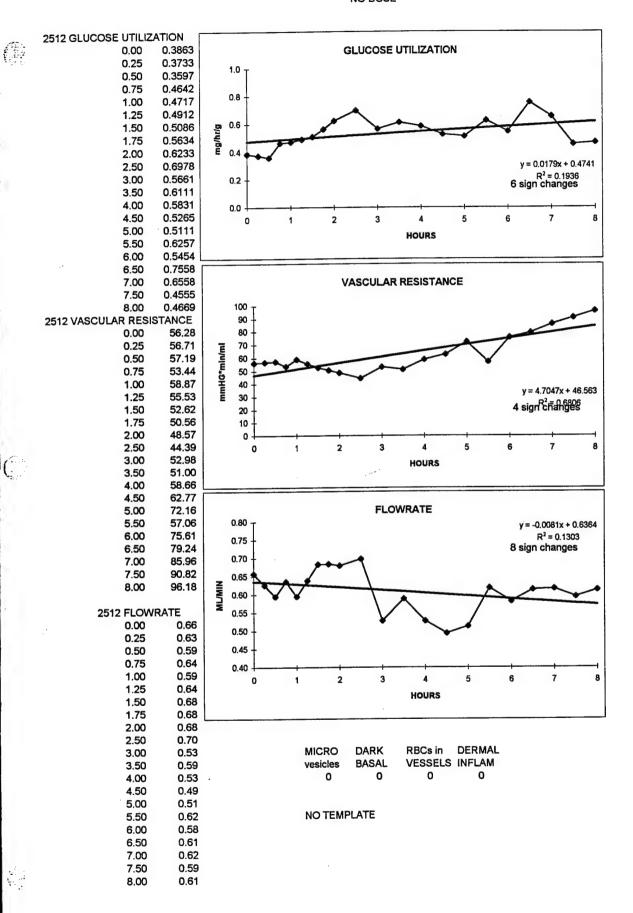
2509PLOT.XLS NO DOSE

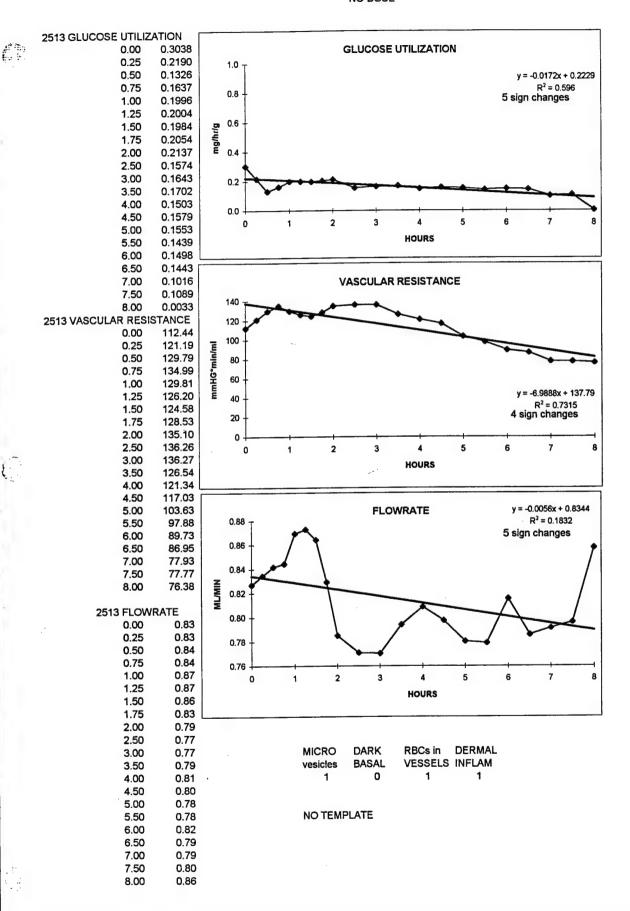


2511PLOT.XLS NO DOSE

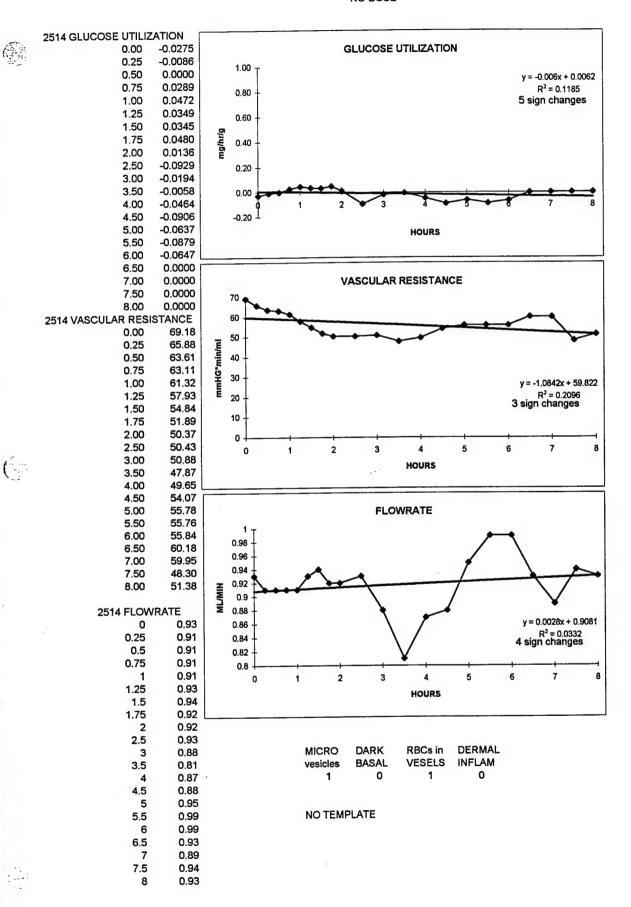


2512PLOT.XLS NO DOSE

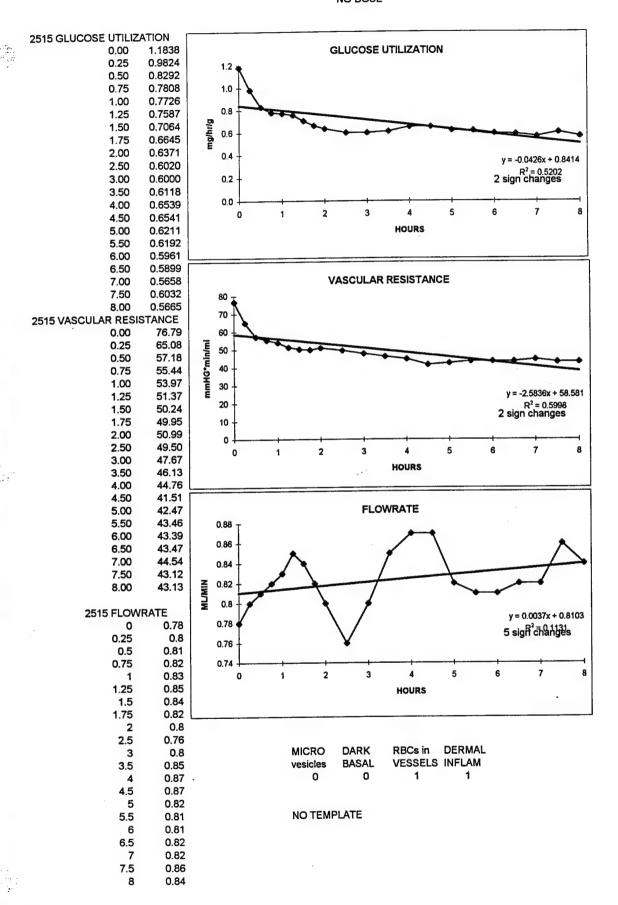


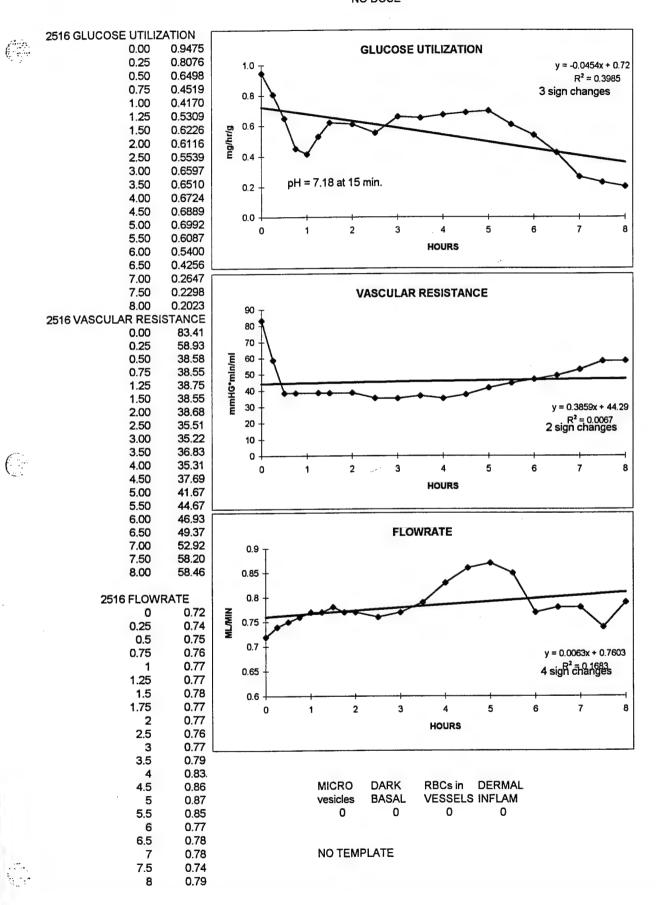


2514PLOT.XLS NO DOSE

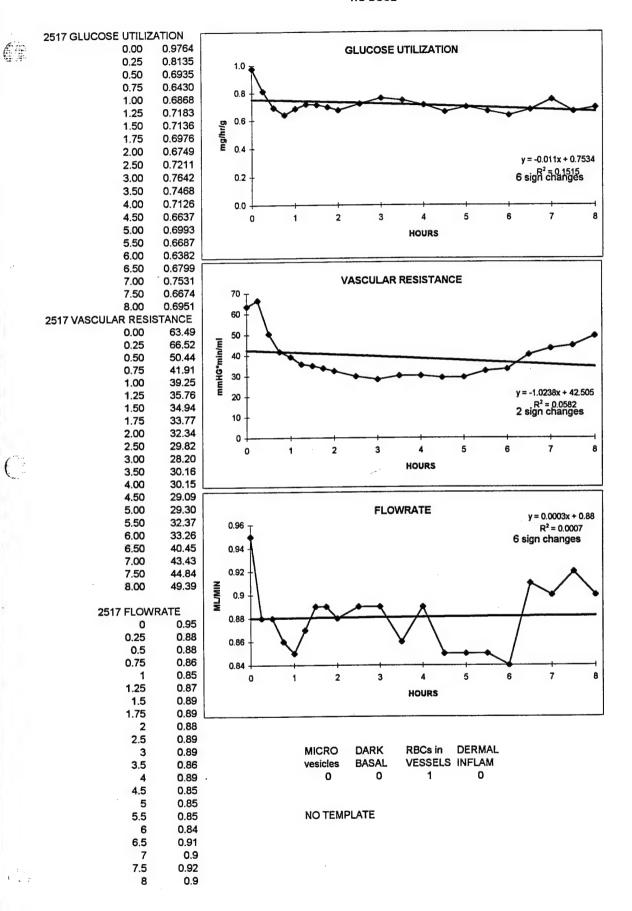


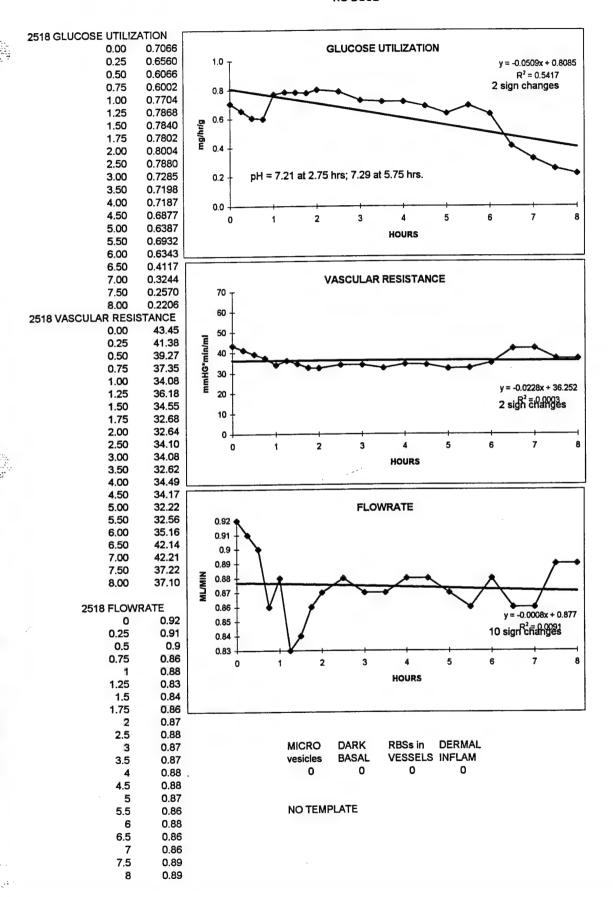
2515PLOT.XLS NO DOSE

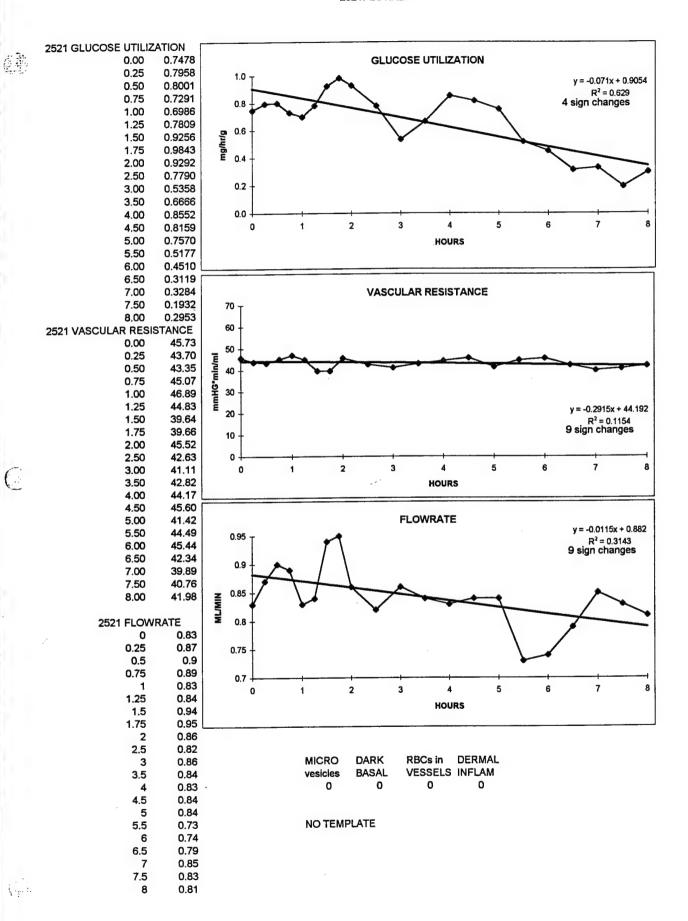




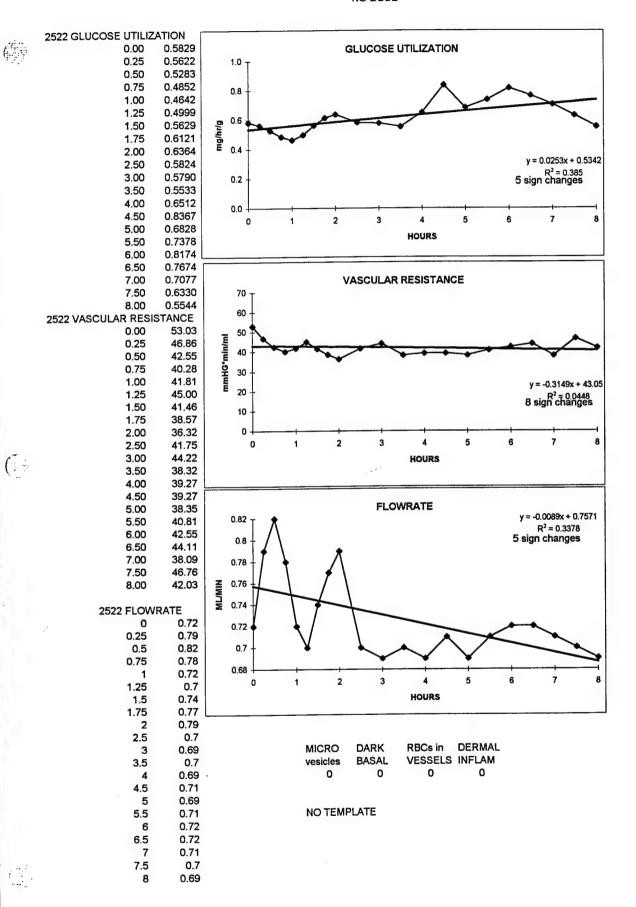
2517PLOT.XLS NO DOSE



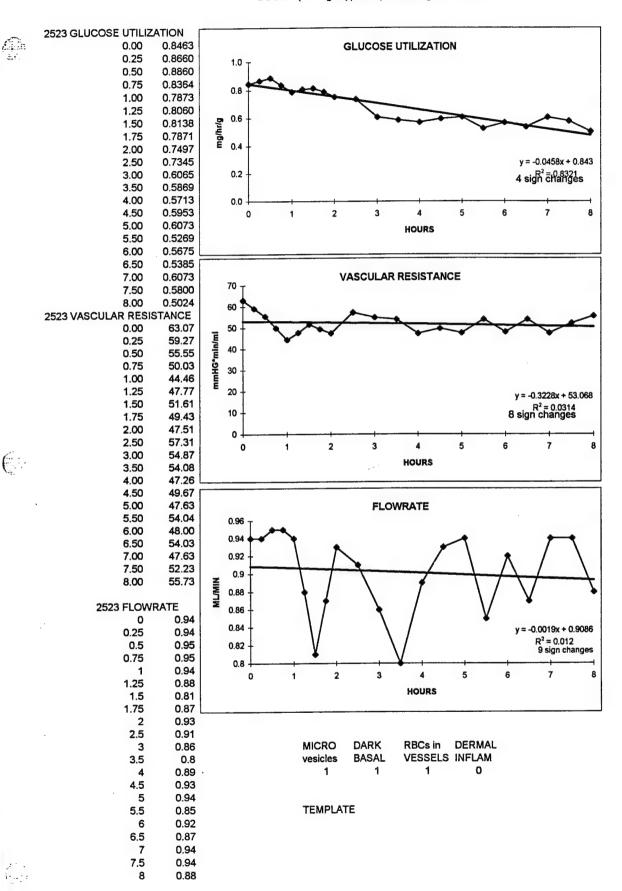




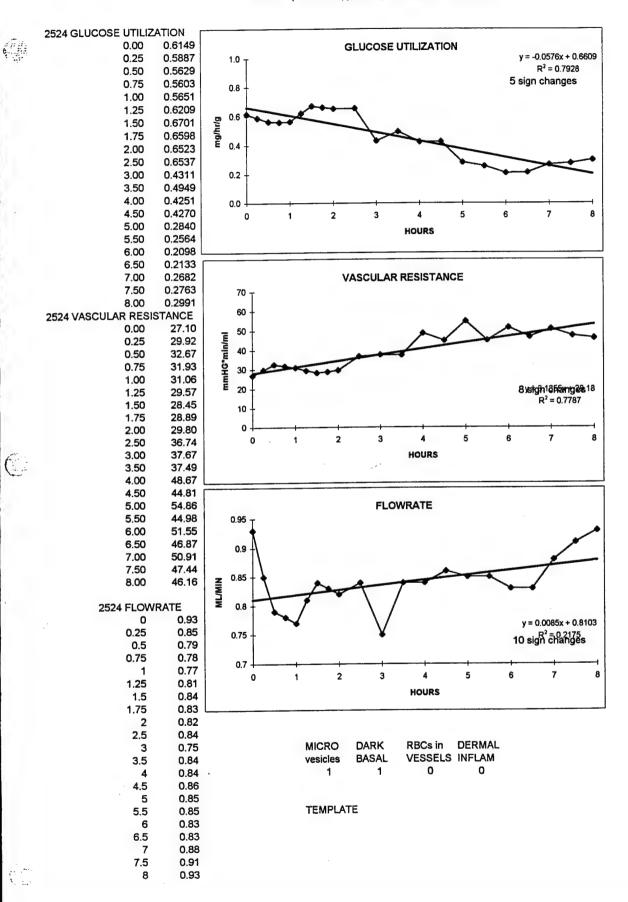
2522PLOT.XLS NO DOSE



 $2523 PLOT.XLS \\ DOSE = (1.0 \ mg/ml)(300 \ ul) = 3000 \ ug \ HD \ in \ ETOH \\$

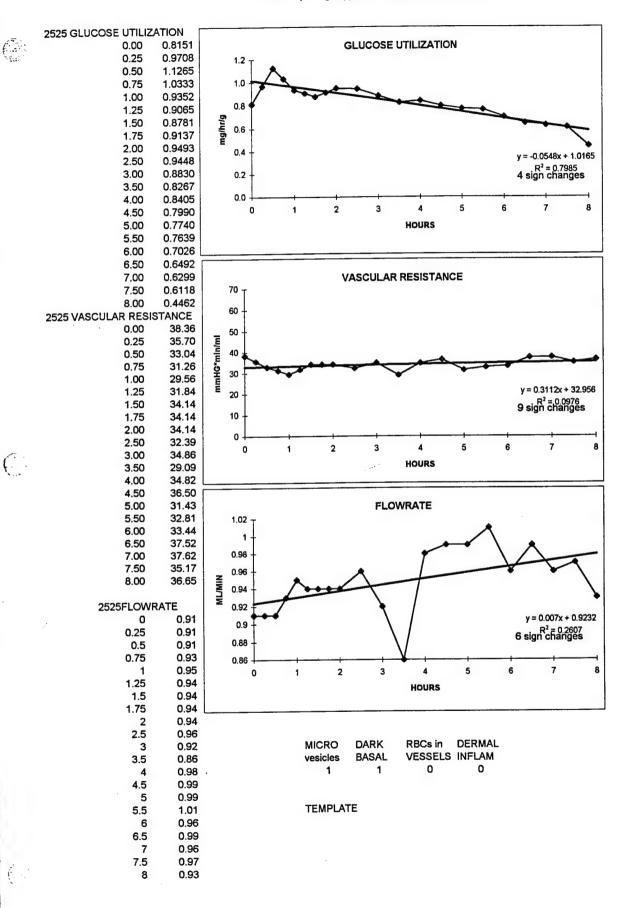


2524PLOT.XLS DOSE = (10 MG/ML)(300 UL) = 3000 UG HD IN ETOH

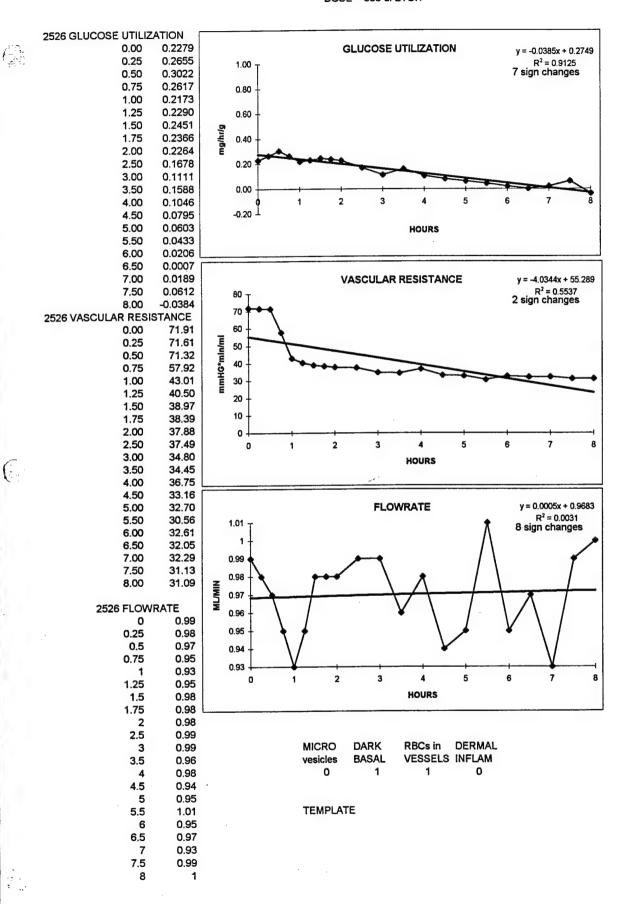


2525PLOT.XLS

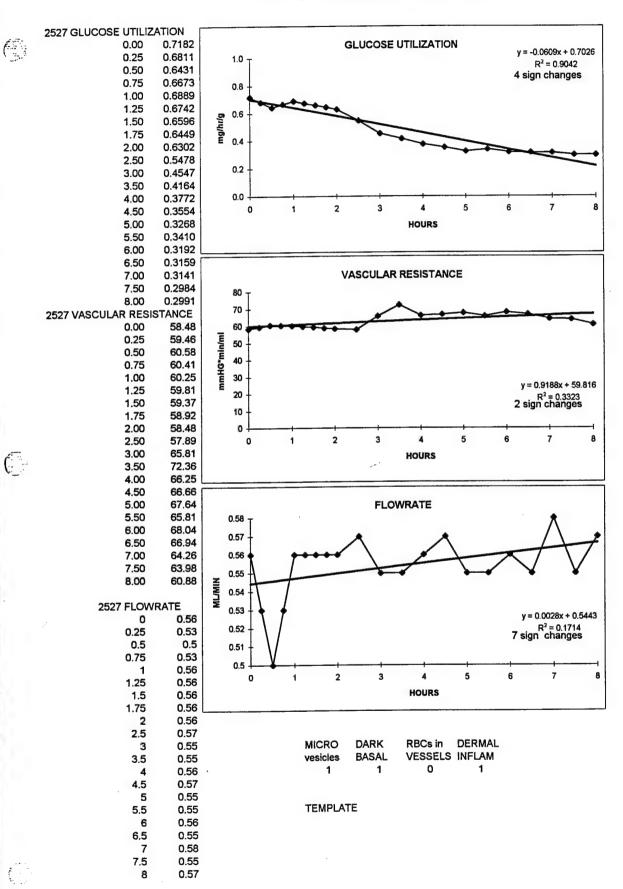
DOSE = (10 mg/ml)(300 uł) = 3000 ug HD in ETOH



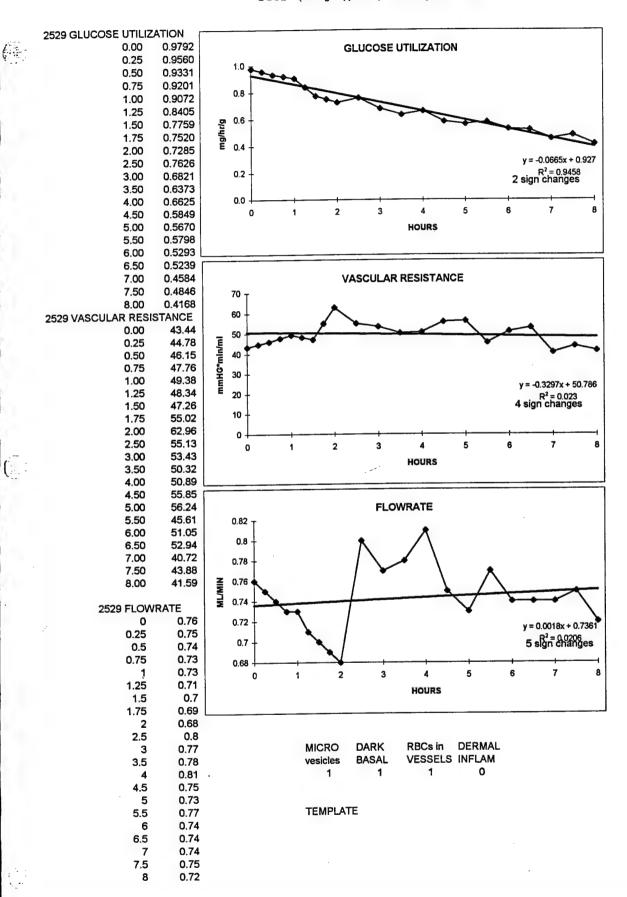
2526PLOT.XLS DOSE = 300 ul ETOH



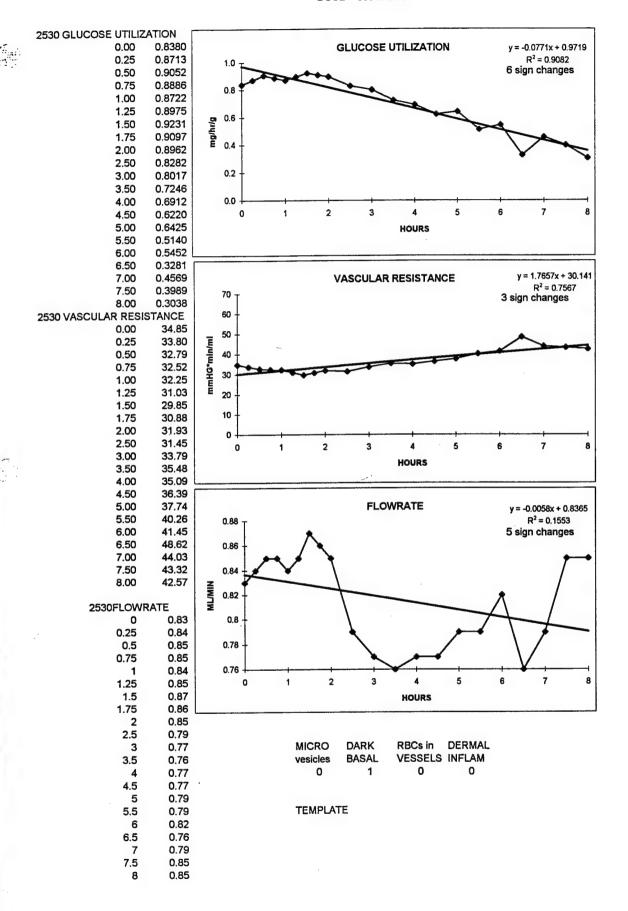
 $2527 PLOT. XLS \\ DOSE = (10 \ mg/ml)(300 \ ul) = 3000 \ ug \ HD \ in \ ETOH$



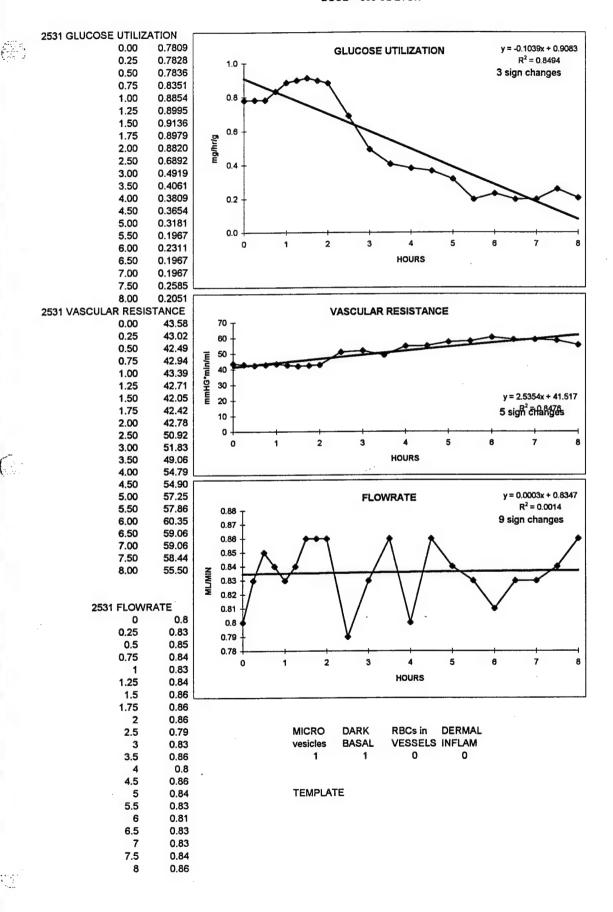
 $2529 PLOT.XLS \\ DOSE = (10 mg/ml)(300 ul) = 3000 ug HD in ETOH$



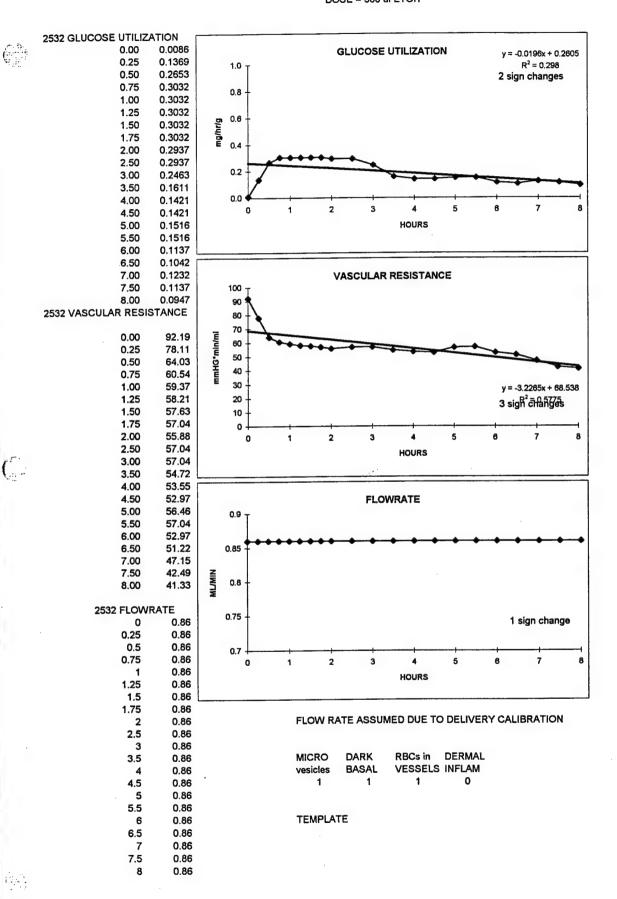
2530PLOT.XLS DOSE = 300 ul ETOH



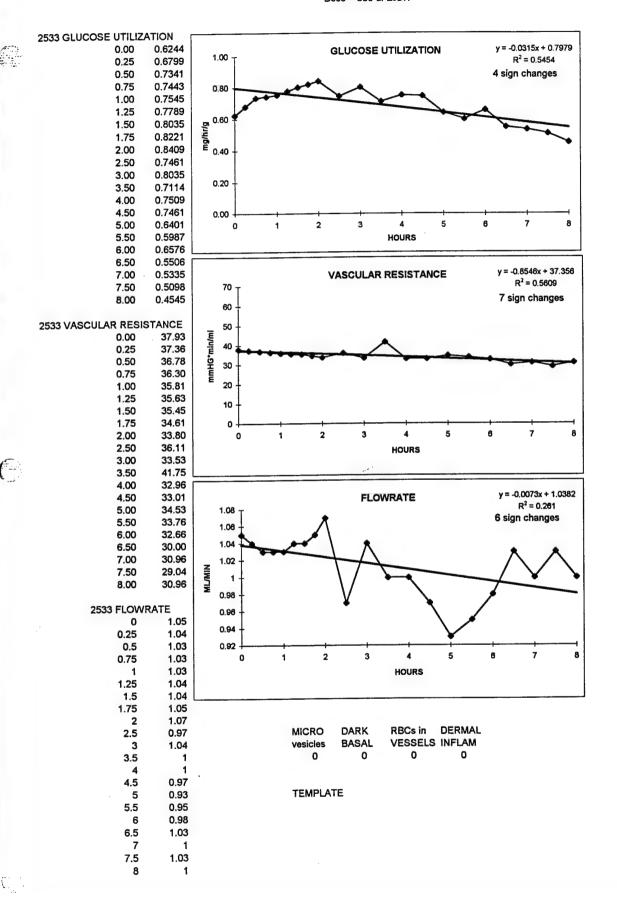
2531PLOT.XLS DOSE = 300 UL ETOH



2532PLOT.XLS DOSE = 300 ul ETOH

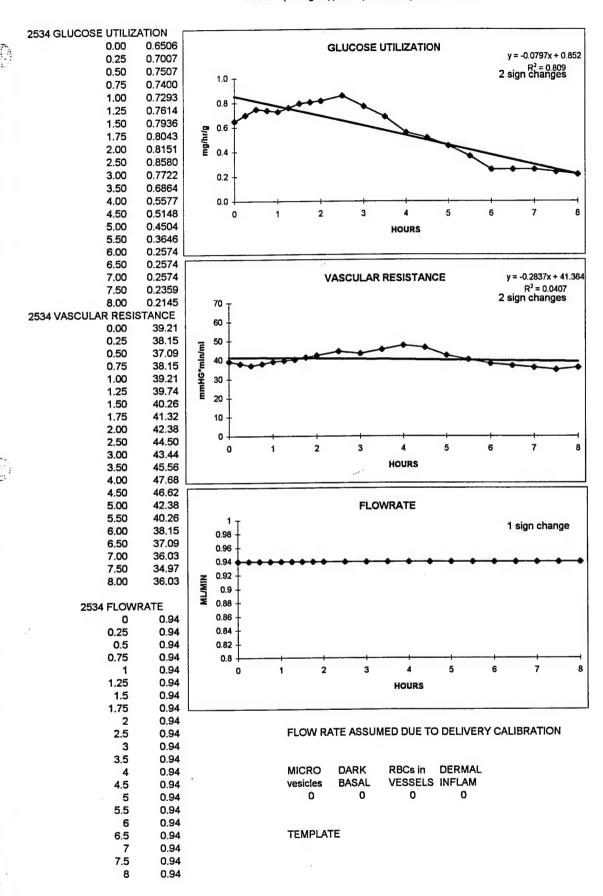


2533PLOT.XLS Dose = 300 ul EtOH

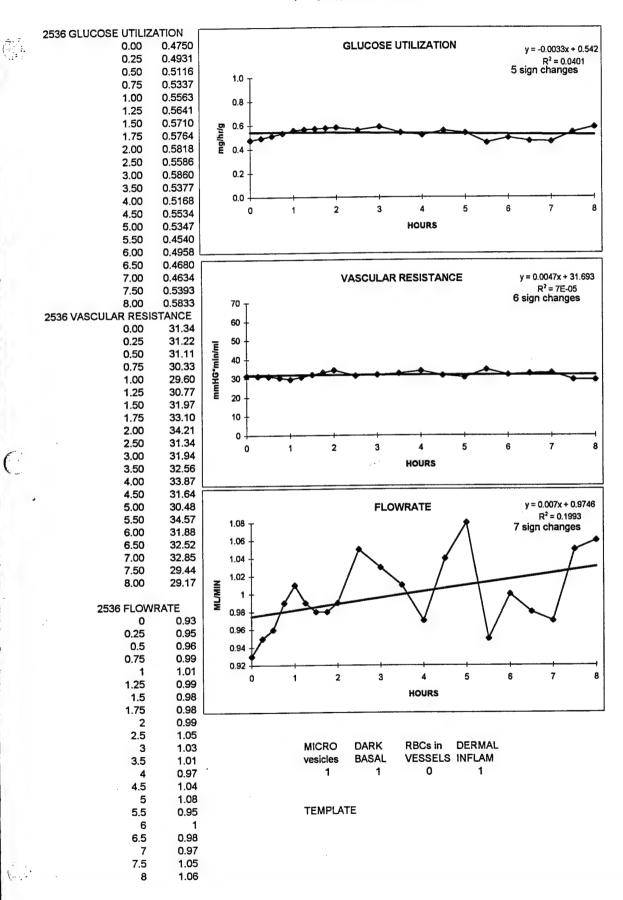


2534PLOT.XLS

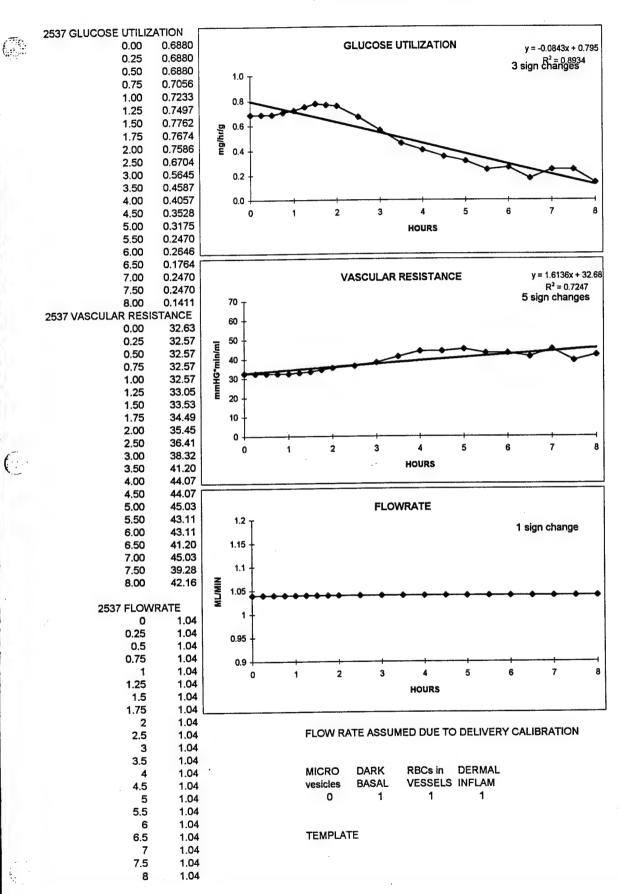
DOSE = (10 mg/ml)(300 ul) = 3000 ug HD in ETOH



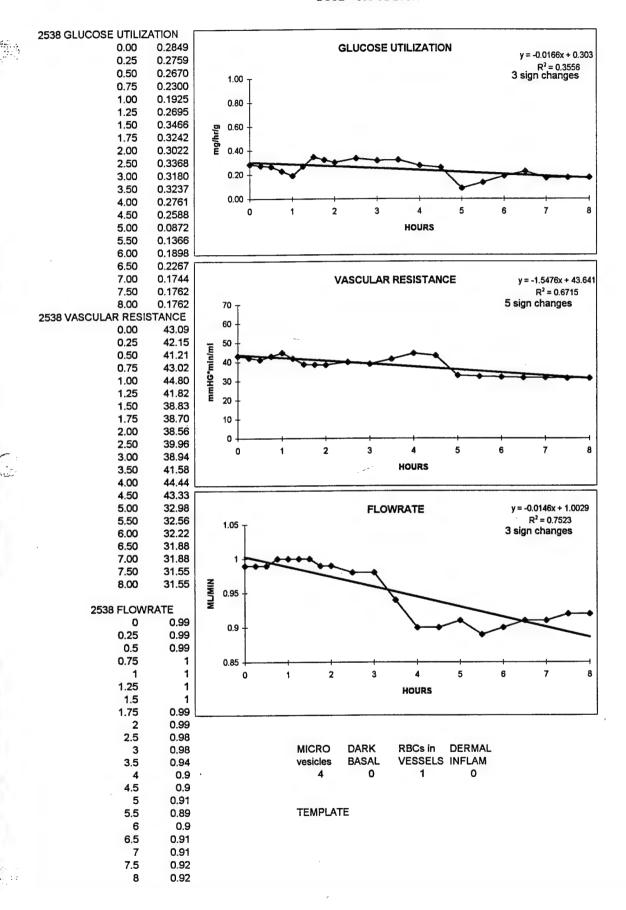
2536PLOT.XLS DOSE = (50 ug/ml)(300 UL) = 15,000 ug HD = ETOH



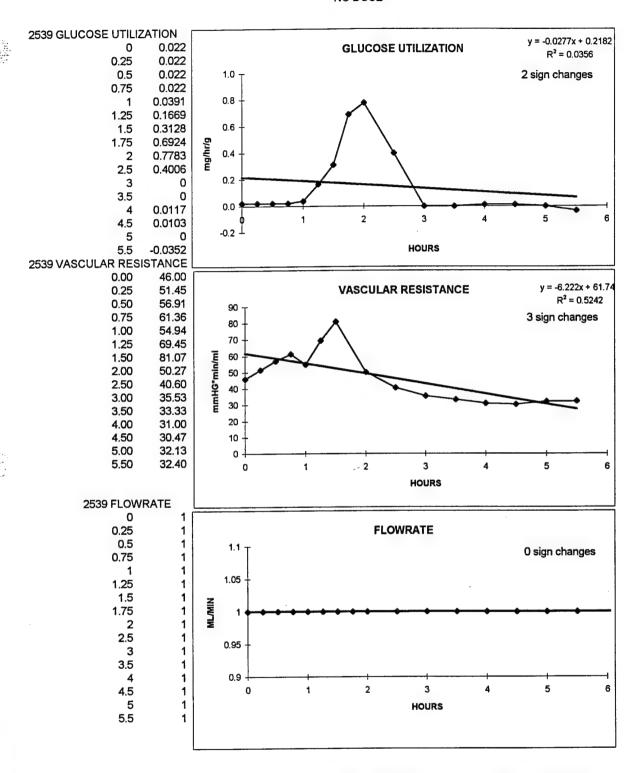
2537PLOT.XLS DOSE = (50 mg/ml) = 15,000 ug HD in ETOH



2538PLOT.XLS DOSE = 300 UL ETOH



2539PLOT.XLS NO DOSE

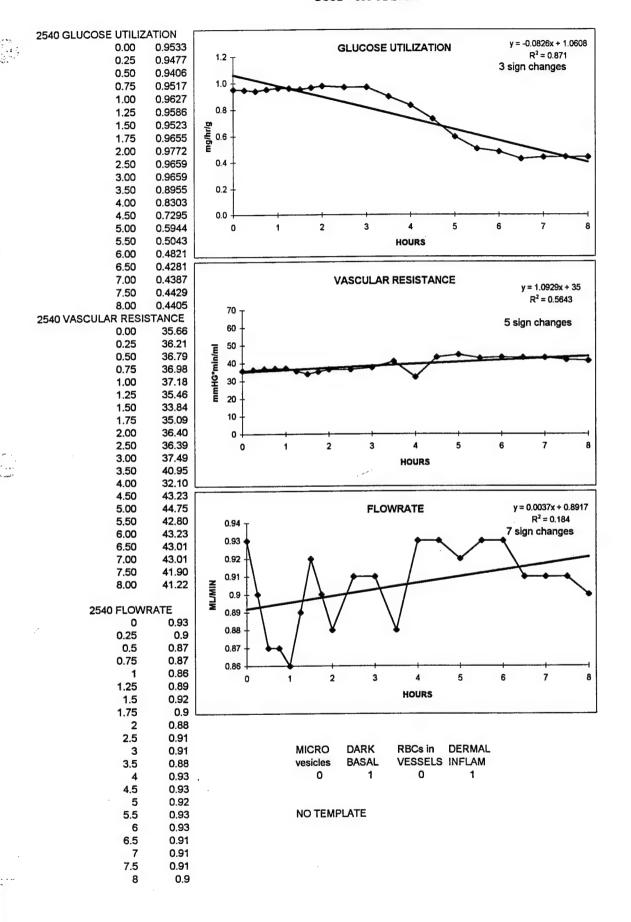


FLOW RATE ASSUMED DUE TO DELIVERY CALIBRATION FLAP ABORTED EARLY

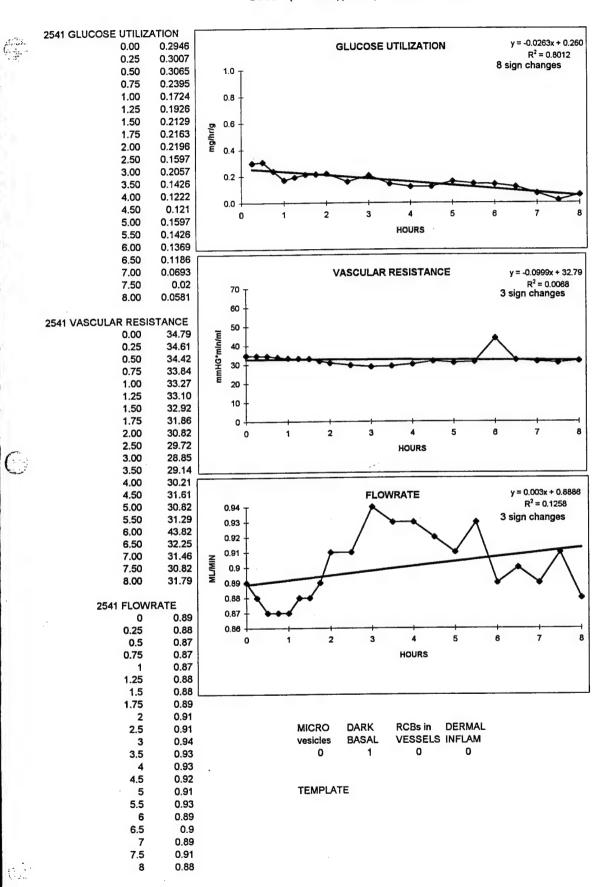
NO HISTOLOGY

NO TEMPLATE

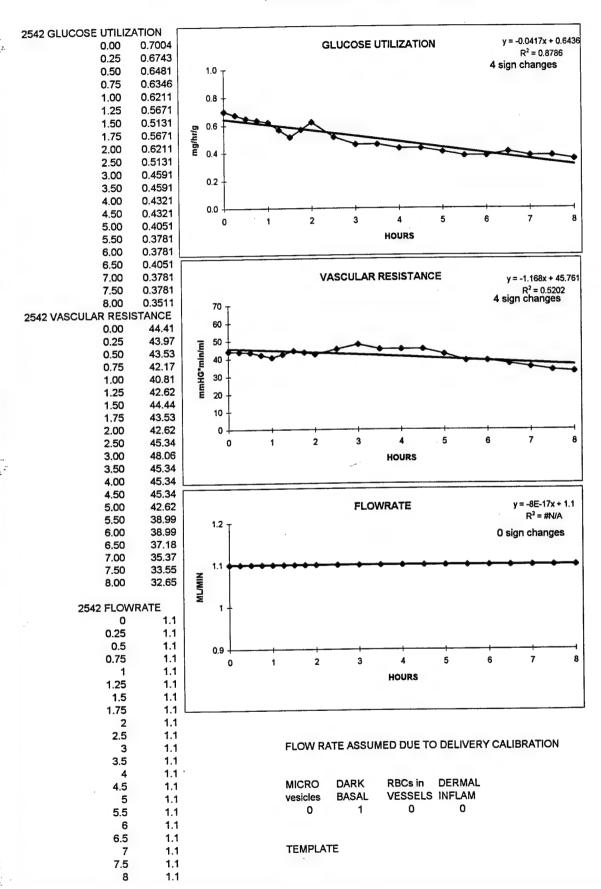
2540PLOT.XLS DOSE = 300 UL ETOH



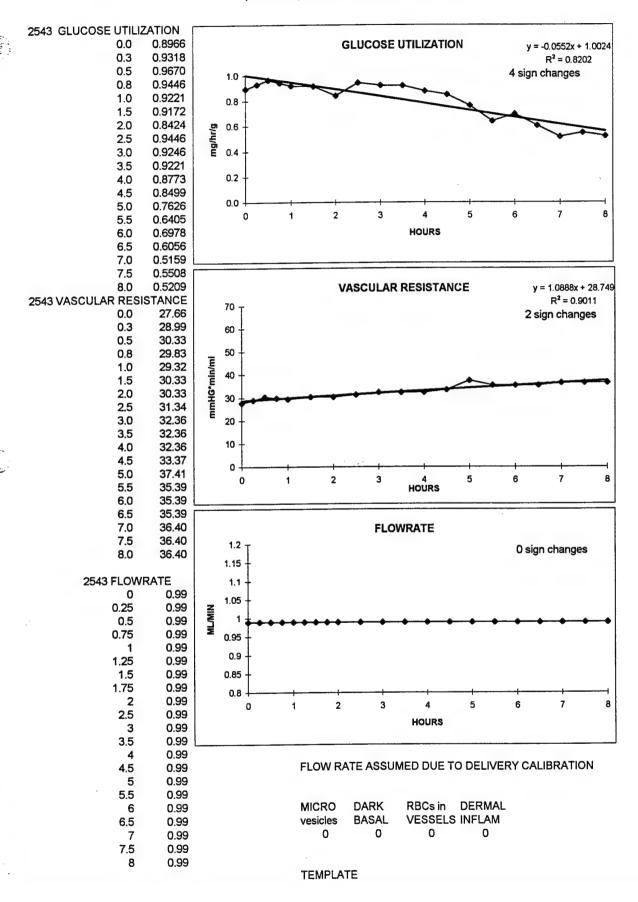
2541PLOT.XLS DOSE = (50 MG/ML)(300 UL) = 15,000 UG HD IN ETOH



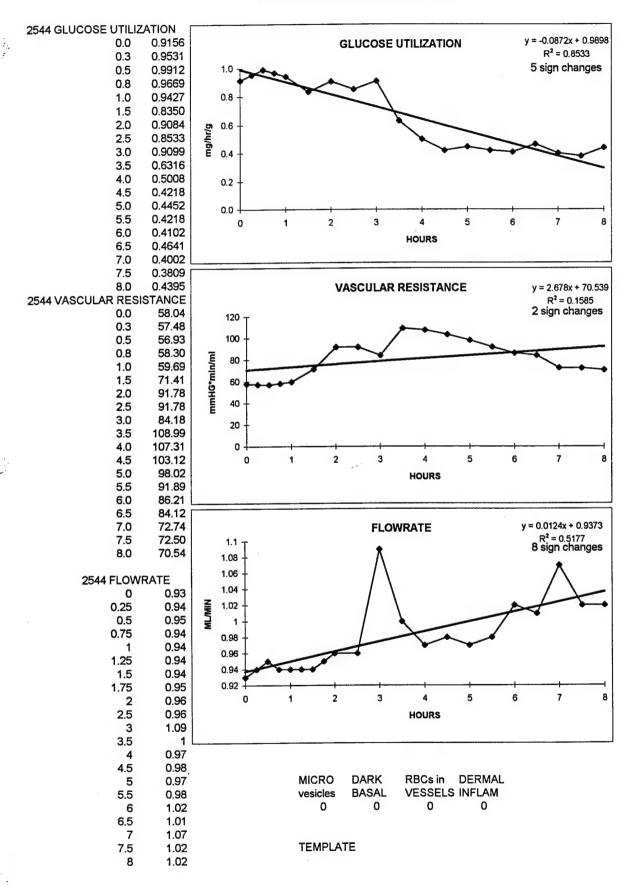
2542PLOT.XLS DOSE = (50 MG/ML)(300 UL) = 15,000 UG HD IN ETOH

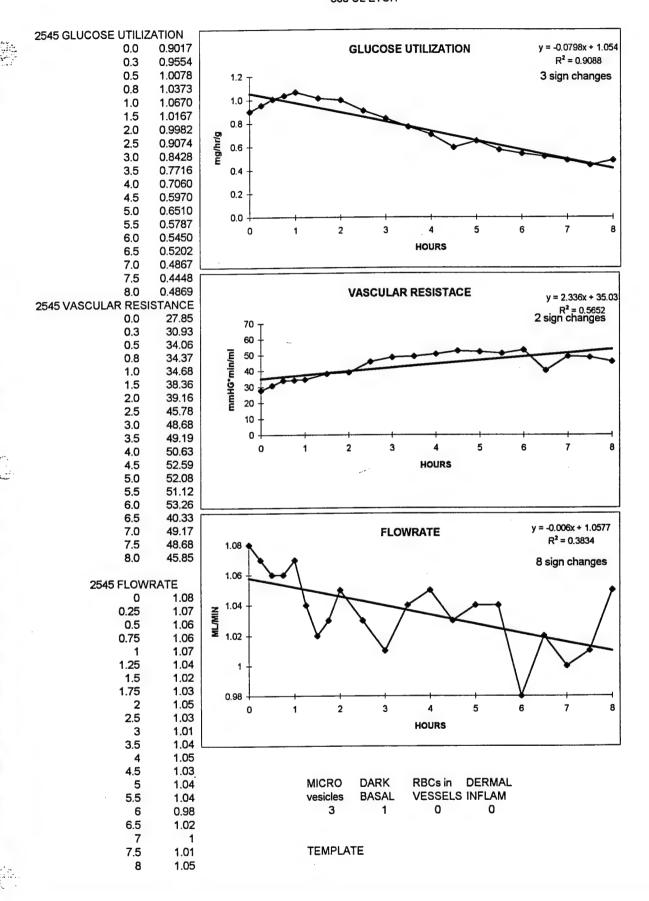


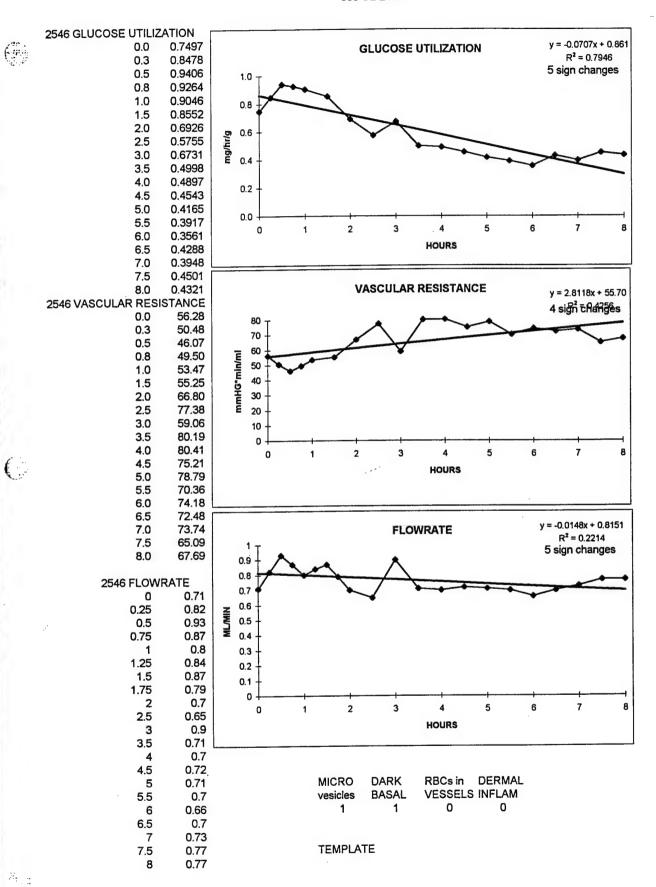
2543PLOT.XLS (50 MG/ML)(300 UL) = 15,000 UG HD IN ETOH



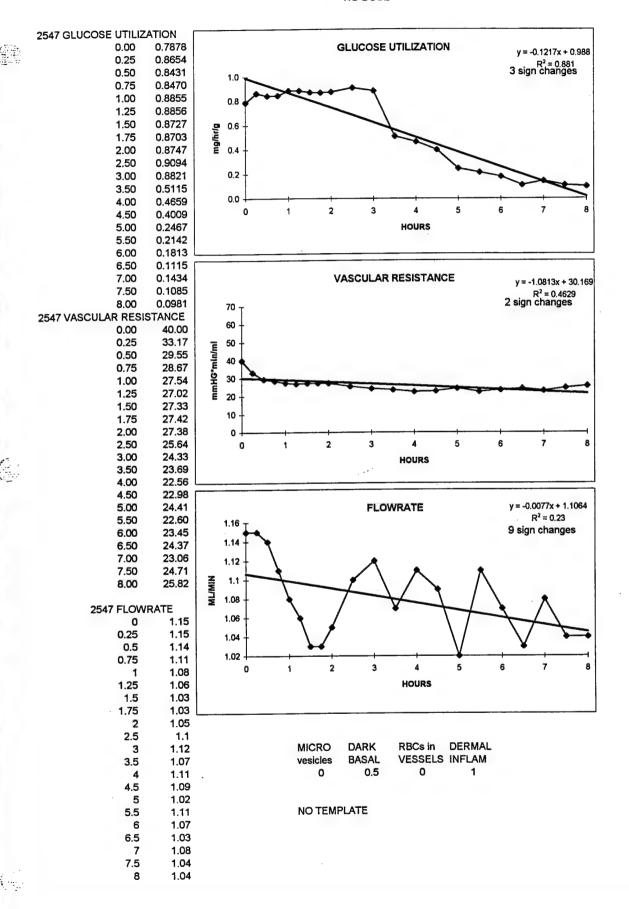
2544PLOT.XLS (50 ug/ml)(300 ul)=15,000 ug HD in ETOH

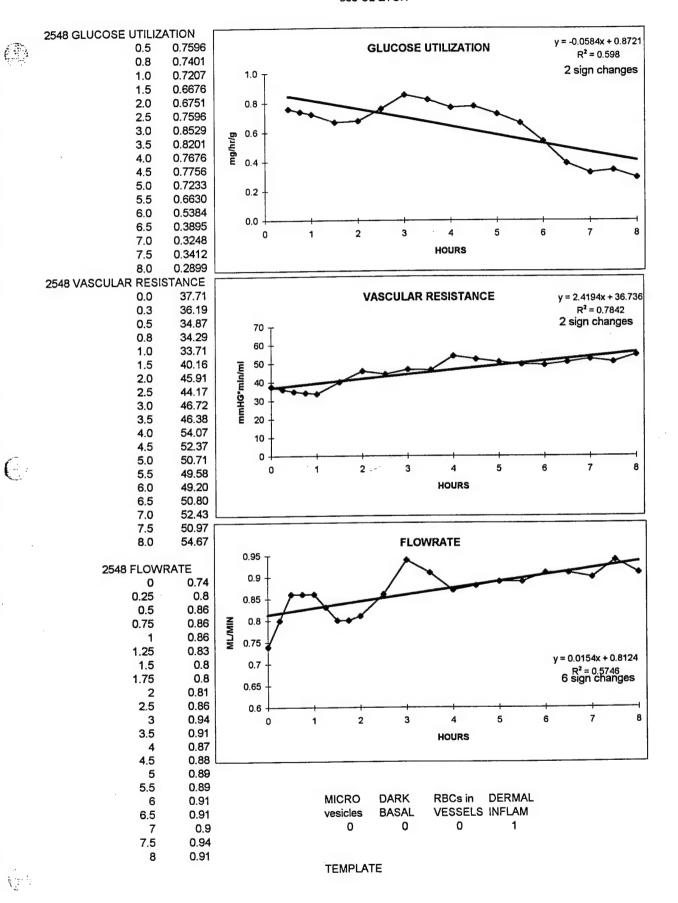




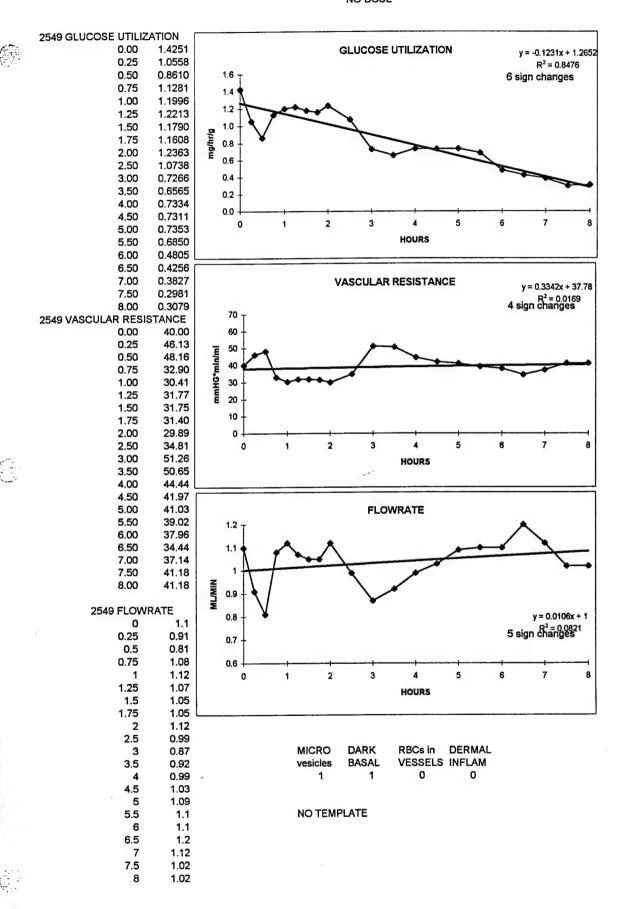


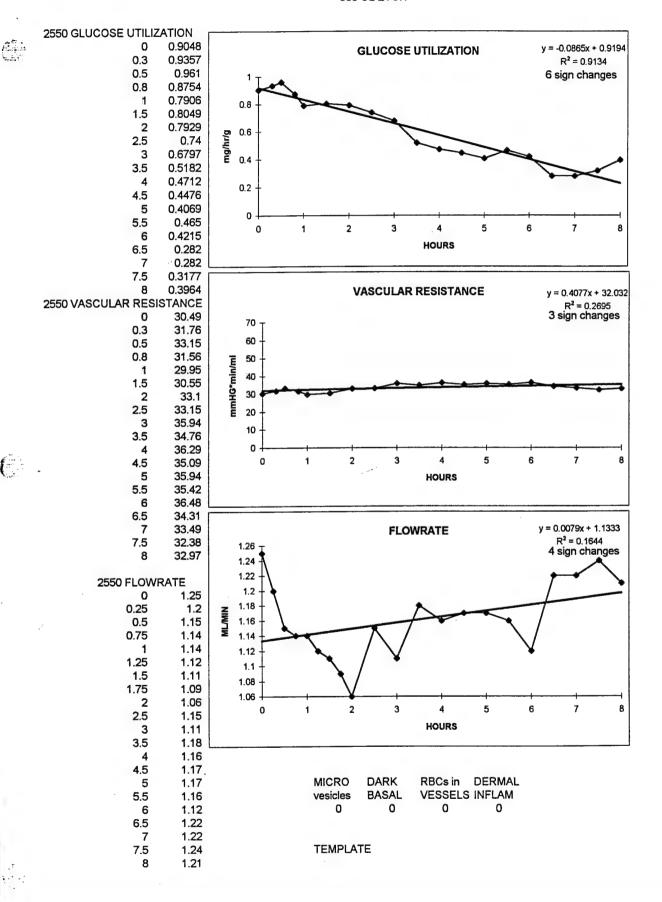
2547PLOT.XLS NO DOSE



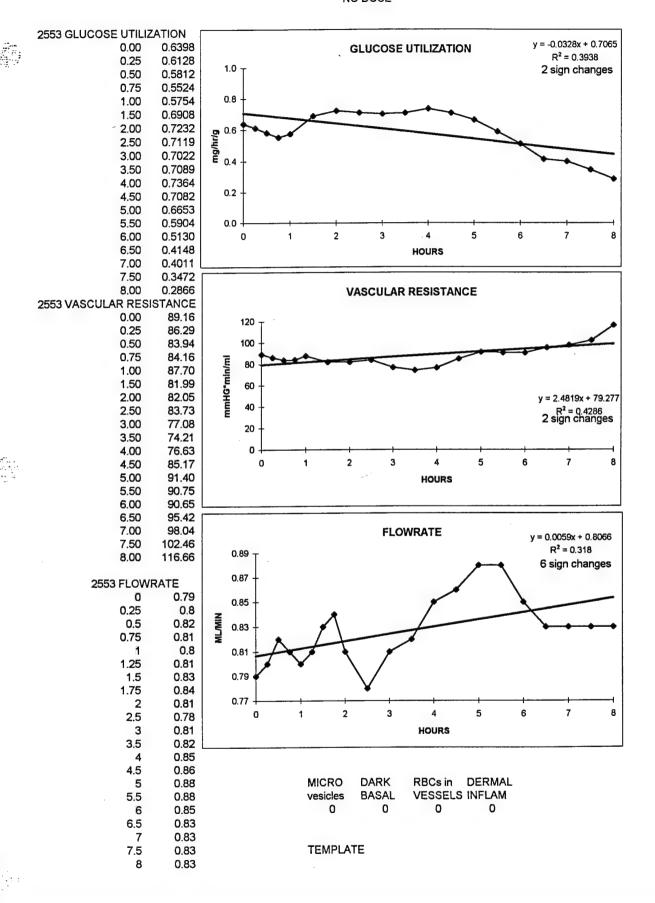


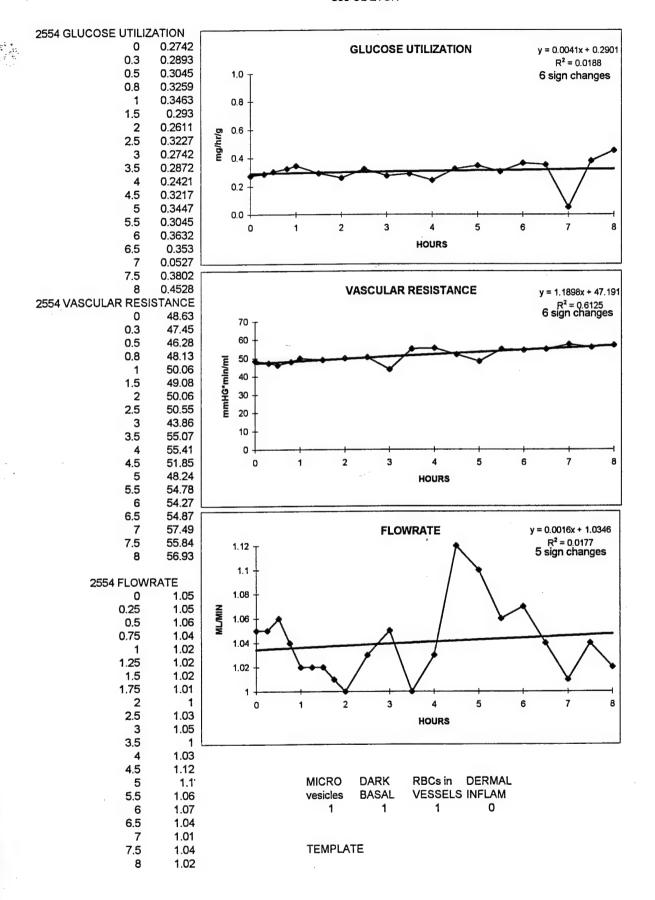
2549PLOT.XLS NO DOSE





2553PLOT.XLS NO DOSE





APPENDIX E

Listings of Raw Data and Computed Variables

Preface to Data Tables: Explanation of Variable Names

In these tables, the listings of raw data and variables computed by SAS are related to variables explained in the text as follows:

Variable in Listings	Definition	Symbol Explained in the Text
FLAPNO	flap number consistent with NCSU-CPTC accounting	
DATE	date of flap harvest and perfusion	
ANIMAL/SIDE	the year, a number assigned to the swine by the supplier, and a letter representing the side of the swine from which the flap was harvested	
PHASE	Phase of the task (1 = technology transfer; 2 = validation)	
FLAPWT	weight (g) of the flap after flushing and before perfusion	W _{fi}
DOSETIME	time of dose application	t = 0
GROUP	flap treatment group	
MEDVOL	volume (mL) of media measured in the waste receptacle at the end of the experiment	V _w
NCSU	an acceptance variable for the flap; "1" denotes acceptance by NCSU-CPTC and "0" denotes non-acceptance	
TARGTIME	the time targeted for taking an observation of physiologic parameters	
ACTLTIME	the actual time an observation of physiologic parameters was taken	
RELTIME	time (hr) after dosing	t
AIRTEMP	perfusion chamber air temperature (C)	
HUMIDITY	perfusion chamber air humidity (relative percent)	
ARTMEDPH	pH of the arterial media	
BPMEAN	mean blood pressure integrated over 2 sec	

Preface to Data Tables: Explanation of Variable Names (Continued)

Variable in Listings	Definition	Symbol Explained in the Text
MEDTEMP	temperature (C) of the media immediately before entering the flap	
MEANFLOW	average of the lower and upper limits of media flow observed during an observation (mL/min)	
LACTATEA	lactate concentration (g/L) in media sampled from the arterial side	L _a
DEXTROSA	glucose concentration (g/L) in media sampled from the arterial side	G _a
LACTATEV	lactate concentration (g/L) in media sampled from the venous, or used, side	L _u
DEXTROSV	glucose concentration (g/L) in media sampled from the venous, or used, side	G _u
LACTDEXT	ratio of lactate produce per unit glucose utilized (no units)	M _{An}
VRESIST	unadjusted vascular resistance (mmHg•min/mL)	
ADJFLOW	MEANFLOW multiplied by the ratio of the actual to the assumed volumes of media delivered during the experiment (mL/min)	F
ADJRESIS	VRESIST multiplied by the ratio of the actual to the assumed volumes of media delivered during the experiment (mL/min)	VR
GLUCUTIL	glucose utilization (mg glucose/hr/g flap tissue)	GU
CUMGLUC	cumulative glucose utilization (mg glucose/g flap tissue)	CGU

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

CUM	0.01	0.01	0.01	0.01	0.01	0.01	0.43	0.80	1.07	1.27	1.60	1.95	2.39	2.62	2.99	3.33	3.70		3	ernc ernc	0.01	0.01	0.01	0.56	1.33	2.08	2.96	3.88	4.59	4.79	4.93	5.03	5.03	5.03	5.06	5.16	5.16	7, 1
NCSU=No GLUC UTIL		•	,														0.74	NCSU=No	פוני	UTIL				1.74	1.58	1.51	1.77	1.82	1.16	0.53	0.26	0.21	0.00	0.00	90.0	0.20	0.00	
10	68.5	136.0	135.3	139.8	91.1	84.5	78.0	112.2	142.3	151.3	99.5	111.0	130.1	139.4	147.3	147.4	153.1		A D.1	RESIS		22.1	26.1	17.6	11.4	9.5	10.6	12.6	45.5	45.8	9.95	69.5	71.7	81.2	86.7	89.5	92.6	7 601
MEDVOL=525 ADJ ADJ FLOW RESI	1.52	92.0	0.77	0.78	0.77	0.77	1.51	1.58	1.50	1.49	1.51	1.49	1.52	1.49	1.51	1.49	1.50	MEDVOL=340	AD.	FLOW		0.50	0.50	1.08	0.97	0.95	0.95	0.95	1.06	1.07	1.16	0.91	0.98	0.97	0.9	1.0	1.04	2
GROUP=EtOH	69.3	137.6	136.8	141.4	92.1	85.5	78.9	113.5	143.9	153.1	100.3	112.2	131.6	141.0	149.0	149.2	154.9	GROUP=EtoH	VPE-	SIST		14.5	17.1	11.5	7.5	6.2	6.9	œ.3	27.9	28.0	30.5	45.3	47.0	53.5	56.8	58.6	62.7	1 27
		•	•		•	•	0.95	1.01	1.23	1.52	1.15	1.08	1.06	1.67	1.22	1.26	1.1	:34 GROU	TOP	DEXT		•		1.28	1.40	1.54	1.51	1.77	1.84	5.09	3.17	2.52		1	8.00	2.24	ı	(
DOSETIME=11:16 ACT DEXT LA FEV ROSV DE)				•			0.915	0.967	0.987	1.030	0.970	0.954	0.883	0.917	0.907	0.933	0.955	TIME=10:	DEXT	ROSV		•		0.610	0.581	0.588	0.539	0.422	0.732	0.935	1.000	1.040	1.060	1.080	1.080	1.100	1.110	120
		0.798	0.861	0.901	0.915	0.930	0.282	0.256	0.247	0.220	0.277	0.278	0.325	0.291	0.319	0.307	0.295	FLAPWT=32.4 DOSETIME=10:34	1 ACT	ATEV		0.765	0.662	0.749	0.832	0.889	1.020	1.220	0.734	0.385	0.273	0.223	0.196	0.179	0.180	0.177	0.166	170
FLAPWT=29.5 DEXT L ROSA A		0.324	0.301	0.290	0.278	0.281	1.190	1.200	1.170	1.160	1.190	1.190	1.170	1.070	1.150	1.160	1.200	:LAPWT=32	DEXT	ROSA		0.490	0.661	1.180	1.160	1.150	1.200	1.100	1.120	1.10	1.080	1.120	1.030	1.080	1.100	1.170	1.100	000
PHASE=1 F N LACT W ATEA		1.160	1.180	1.180	1.170	1.190	0.022	0.020	0.022	0.022	0.023	0.022	0.021	0.036	0.022	0.022	0.023		TAF	ATEA	•	1.160	1.140	0.022	0.021	0.021	0.020	0.020	0.020	0.020	0.019	0.021	0.019	0.020	0.020	0.020	0.020	
-4-R PH MEAN FLOW	1.50	92.0	0.76	0.77	0.76	0.76	1.50	1.56	1.48	1.47	1.50	1.47	1.51	1.48	1.49	1.48	1.49	/SIDE=95-263-4-L PHASE=1	MEAN	FLOW		0.76	92.0	1.65	1.48	1.45	1.45	1.45	1.62	1.64	1.77	1.39	1.49	1.49	1.52	1.54	1.58	7
'SIDE=95-263-4-R IP MED MEA! :AN TEMP FLO!	35.1	35.1	35.1	35.1	35.2	34.4	35.7	35.1	35.6	35.9	35.6	35.7	35.5	35.3	35.2	35.6	35.1	=95-263	MED	TEMP	1.5	36.6	36.7	37.6	36.6	36.7	36.8	36.8	34.8	34.8	34.7	35.3	34.9	35.1	34.9	33.7	35.1	
	104	104	104	109	2	9	118	177	213	225	150	165	198	208	222	220	230		Q	MEAN	36	=	13	9	=	٥	9	12	45	9	24	63	2	2	88	8	6	101
ANIMAL ART MEDPH M	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.5	7.5	4.7	7.5	7.5	7.5	7.4	7.5	7.4	7.3	ANIMAL	ADT	MEDPH	20.02	7.8	7.5	9.7	9.2	7.5	9.2	7.4	7.4	7.5	9.7	7.0	7.6	8.0	7.2	7.9	8.1	
2/08/95 HUMI DITY	44.3	44.3	44.5	43.4	43.5	43.6	48.4	44.7	47.0	47.5	45.5	4.44	45.0	44.1	44.7	44.5	46.5	2/08/95	1	DITY	32.8	34.7	31.3	27.9	29.9	30.6	32.4	31.4	30.5	31.8	33.8	33.6	34.2	33.5	34.7	36.5	34.6	, ,
DATE=02/08/95 AIR HUMI TEMP DITY	37.3	37.3	37.5	37.6	37.5	37.0	37.9	37.4	37.6	38.0	38.1	37.9	37.9	37.8	37.9	37.9	37.7	DATE=02/08/95	Q I V	TEMP	36.6	37.2	37.2	38.6	37.1	37.2	37.1	37.3	37.3	37.3	37.0	37.5	37.3	37.3	37.2	37.2	37.4	
FLAPNO=2505 TL REL- ME TIME	-1.00	-0.75	-0.50	-0.25	00.0	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	6.00	FLAPN0=2506	- 130	TIME	-0.85	-0.53	-0.32	0.00	0.48	0.98	1.48	1.98	2.60	2.98	3.48	3.98	4.48	4.98	5.48	5.98	6.48	
ACTL TIME	10:16	10:31	10:46	11:01	11:16	11:46	12:16	12:46	13:16	13:46	14:16	14:46	15:16	15:46	16:16	16:46	17:16	FLAP	ITJV	TIME	9:43	10:02	10:15	10:34	11:03	11:33	12:03	12:33	13:10	13:33	14:03	14:33	15:03	15:33	16:03	16:33	17:03	17.74
TARG	10:16	10:31	10:46	11:01	11:31	12:01	12:31	13:01	13:31	14:01	14:31	15:01	15:31	16:01	16:31	17:01	17:31		TABG	TIME	9:43	9:58	10:13	10:28	10:58	11:28	11:58	12:28	12:58	13:28	13:58	14:28	14:58	15:28	15:58	16:28	16:58	7.7

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	SUL GLUG	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.05 0.09 0.09 0.09 0.09 0.09 0.09 0.09	
NCSU=No	GLUC UT1L	0.33 0.00 0.33 0.00 0.00 0.00 0.00 0.00	NCSU=No
MEDVOL=335	ADJ RESIS	59.7 57.1 54.6 54.6 55.2 55.0 66.8 66.8 80.3 76.7 1111.7 1157.6 1157.6 1153.4 1153.4	MEDVOL=265
	ADJ FLOW	0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.65	
GROUP=No Topical	VRE- SIST	38.6 33.5 33.5 33.5 33.5 43.1 43.1 72.1 72.1 72.1 72.1 72.1 72.1 72.1 72	GROUP=No Topical
GROUP=	LACT	1.25	GROUP
DOSETIME=10:50	DEXT	1.080 1.100 1.140 1.120 1.120 1.130 1.130 1.190 1.190 1.180 1.180 1.140	DOSETIME=10:32
DOSETIA	LACT	0.123 0.145 0.163 0.154 0.155 0.155 0.120 0.120 0.146 0.148 0.187	DOSETI
FLAPWT=16.7	DEXT	1.020 1.020 1.050 1.110 1.220 1.070 1.220 0.991 1.200 1.200 1.100 1.1100 1.1100 1.1100	FLAPWT=15.9
	LACT	0.025 0.021 0.020 0.021 0.023 0.024 0.024 0.020 0.020 0.020 0.020 0.020 0.020	_
PHASE=1	MEAN	1.04 0.09 0.09 0.09 0.09 0.09 0.09 1.06 1.06 1.07 1.07	PHASE=
5-258-1-R	MED	35.5 35.5 35.5 35.5 35.5 35.5 35.5 35.5	'SIDE=95-258-1-L
'S1DE=95-	BP MEAN	03 8 4 4 8 8 8 4 8 8 8 8 8 8 8 8 8 8 8 8	/SIDE=9
ANIMAL/	ART Medph	2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	ANIMAL,
36/60	HUMI	35.00 37.00	56/60
DATE=02/09/95	A1R TEMP	22 22 22 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	DATE=02/09/95
	REL- TIME	0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50	
FLAPNO=2507	ACTL TIME	10:25 10:26 11:26 11:26 13:21 13:21 14:21 15:26 15:26 17:26 17:26 17:26 17:26 17:26 17:26 17:26 17:26 17:26	FLAPNO=2508
	TARG	10:28 10:28 10:28 11:50 11:50 12:20 13:20 14:50 15:20 16:20 16:20 17:20 17:20 18:20 18:20	1

	CUM	OLUC	0.01	0.06	0.20	0.34	0.65	0.85	1.16	1.50	1.80	2.15	2.45	2.78	3,13	3.45	3.76	4.11	4.45
NCSU=No	GLUC	UTIL	79.0	0.18	0.50	0.63	99.0	0,40	0.62	29.0	09-0	29.0	0.63	99.0	0.70	0.57	69.0	69.0	69.0
MEDVOL=265	ADJ	RESIS	137.2	123.9	167.0	179.8	183.7	184.8	159.5	209.5	219.1	208.4	195.8	218.1	223.0	237.5	188.7	238.9	152.4
	ADJ	FLOW	0.50	0.50	0.49	0.47	0.50	0.36	0.50	0.48	0.45	0.48	0.45	27.0	0.50	0.48	0.49	97.0	0.52
GROUP=No Topical	VRE-	SIST	70.1	63.3	85.3	91.8	93.8	7.76	81.4	107.0	111.9	106.4	100.0	111.4	113.8	121.3	96.4	122.0	77.8
GROUP=I	LACT	DEXT	0.29	1.92	1.20	1.26	1.31	1.56	1.36	1.18	1.22	1.23	1.28	1.21	1.21	1.45	1.29	1.22	1.36
E=10:32	DEXT	ROSV	1.020	1.080	1.040	0.998	1.010	1.030	1.030	1.040	1.040	1.020	1.030	1.020	1.050	1.050	1.040	1.040	1.040
DOSETIME=10:32	LACT	ATEV	0.076	0.118	0.192	0.252	0.259	0.257	0.254	0.247	0.244	0.257	0.267	0.252	0.254	0.255	0.268	0.267	0.267
FLAPWT=15.9	DEXT	ROSA	1.200	1.130	1.180	1.180	1.190	1.180	1.200	1.230	1.220	1.210	1.220	1.210	1.240	1.210	1.230	1.240	1.220
_	LACT	ATEA	0.023	0.022	0.024	0.023	0.024	0.023	0.023	0.023	0.024	0.023	0.023	0.023	0.024	0.023	0.023	0.023	0.022
PHASE=	MEAN	FLOW	0.99	0.98	0.95	0.92	26.0	0.71	0.97	0.94	0.89	0.94	0.88	0.93	0.98	0.94	0.97	0.91	1.02
MAL/SIDE=95-258-1-1	MED	TEMP	35.8	37.7	36.6	38.0	37.7	37.9	37.7	37.4	37.6	37.7	37.7	37.6	37.6	38.0	37.9	38.0	38.0
/SIDE=9!	В	MEAN	69	62	<u>8</u>	8	6	29	2	9	8	9	88	103	11	114	93	=======================================	62
ANIMAL,	ART	MEDPH	7.6	7.4	7.5	7.5	7.5	7.5	7.4	7.5	7.6	7.5	7.7	7.5	7.6	7.4	7.5	7.6	7.5
56/60.	HUMI	DITY	43.1	47.5	45.1	44.8	45.0	6.44	46.1	44.1	45.7	45.7	44.0	45.7	45.0	44.2	44.2	46.5	45.5
DATE=02/09/95	AIR	TEMP	38.3	38.4	37.5	38.1	38.1	38.7	38.1	38.1	38.1	38.4	38.1	38.1	38.0	38.2	38.1	38.2	38.2
	REL-	TIME	-0.78	-0.50	-0.23	0.0	0.47	0.97	1.47	1.97	2.47	2.98	3.47	3.97	4.47	4.97	5.47	5.97	6.47
FLAPNO=2508	ACTL	TIME	9:45	10:02	10:18	10:32	11:00	11:30	12:00	12:30	13:00	13:31	14:00	14:30	15:00	15:30	16:00	16:30	17:00
	TARG	TIME	9:45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	פרחכ כחש	4.72 4.96 5.17		CUM	0.01 0.72 0.82 0.97	1.27	1.95 2.20 2.40	2.71 3.33 3.63	3.86 4.09 4.30		GLUC	0.01 0.24 0.48 0.64 1.18 1.59 2.38
NCSU=No	GLUC UT 1 L	0.53 0.48 0.43	NCSU=No	GLUC	0.35 0.63 0.80 0.60	0.51 0.28 0.37	0.42	0.62 0.53 0.71 0.59	0.46 0.46 0.43	NCSU=No	GLUC	0.91 0.87 0.96 1.07 0.82 0.78
MEDVOL=265	ADJ RESIS	161.3 131.2 158.3	MEDVOL=360	ADJ RESIS	222.5 325.1 240.8 201.1	223.0 197.3 212.4	251.9 228.7 241.9	247.5 299.3 263.5 274.5	290.0 277.1 280.1	MEDVOL=304	ADJ RESIS	118.4 113.8 108.9 96.4 83.1 96.5 101.3
	ADJ FLOW	0.48 0.50 0.48		ADJ FLOW	0.68 0.52 0.67 0.64	0.63	9.75	0.71 0.55 0.65 0.65	0.60 0.62 0.61		ADJ FLOW	0.58 0.54 0.63 0.63 0.65 0.65
GROUP=No Topical	VRE- SIST	82.4 67.0 80.9	GROUP=No Topical	VRE- SIST	154.3 225.5 167.0 139.5	154.7 136.8 147.3	174.7 158.7 167.8	171.7 207.6 182.8 190.4	201.2 192.2 194.3	GROUP=No Topical	VRE- SIST	69.3 66.7 66.5 56.5 59.3 68.5
GROUP=	LACT	1.36	GROUP=	LACT	0.46 0.48 0.63 0.71	0.98 1.83 1.36	2.11	1.13	1.13		LACT	0.65 0.79 0.98 0.90 1.03 1.17
E=10:32	DEXT ROSV	1.090	E=11:30	DEXT	1.060 0.922 0.953 1.050	001.1	1.090	1.050 1.050 1.010	1.110 1.140 1.140	DOSETIME=10:50	DEXT	0.829 0.852 0.852 0.848 0.904 0.925 0.974
DOSETIME=10:32	LACT	0.227 0.207 0.208	DOSETIME=11:30	LACT	0.095 0.204 0.256 0.231	0.269	0.339 0.301 0.285	0.351 0.362 0.415 0.346	0.296 0.264 0.280	DOSETIM	LACT	0.297 0.344 0.403 0.427 0.417 0.432 0.427
FLAPWT=15.9 ontinued)	DEXT	1.240 1.240 1.230	FLAPWT=26.8	DEXT	1.220 1.300 1.320 1.320	1.340 1.230 1.290	1.230 1.270 1.330	1.320 1.350 1.350	1.350 1.370 1.360	FLAPWT=27.7	DEXT	1.250 1.260 1.250 1.330 1.300 1.320
- 0	LACT	0.023 0.023 0.023		LACT	0.021 0.023 0.023 0.024	0.024	0.023 0.023 0.024	0.025 0.024 0.024 0.024	0.024 0.023 0.023		LACT	0.024 0.023 0.023 0.023 0.023 0.022
PHASE=1	MEAN	0.94	PHASE=1	MEAN	0.99 0.75 0.97	0.95	1.04	1.03 0.79 0.93	0.87 0.90 0.88	PHASE=1	MEAN	1.00 0.99 0.93 1.13 1.05 1.05
E=95-258-1-L	MED	37.9 38.0 37.8	IDE=95-21-2-R	MED TEMP	36.8 35.2 35.6	35.0 36.0 36.0	36.2 36.1 36.1	36.2 36.5 36.5 36.5	36.5 36.4 36.9	IDE=95-21-2-L	MED	37.2 37.2 37.3 37.3 37.2 37.3
	BP	1		BP MEAN	152 168 162 129	150 151 151	35 25 15 15 15 15 15 15 15 15 15 15 15 15 15	178 178 178	172 173	-/SIDE=9	BP	38228386
ANIMAL/SID	ART Medph	7.5 7.6 7.3	ANIMAL/S	ART MEDPH	7.4	2.5 2.5 2.5 3.5	444	7.3 7.6 7.0	7.0	ANIMAL/S	ART MEDPH	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.
	HUMI DITY	44.5 46.0 45.0	15/95	HUMI	35.3 35.0 41.2 38.4	36.7 35.5	42.0 33.7 33.5	33.4 34.3 33.2	32.8 33.4 34.0	/15/95	HUMI	37.1 35.5 35.5 35.2 35.2 35.2 35.5
DATE=02/09/95	AIR TEMP	38.2 38.2 38.2	DATE=02/15/95	AIR TEMP	36.0 36.1 35.8 36.1	34.8 35.2 35.9	36.2 36.2 36.2 36.2	36.2 36.3 36.5	36.4 36.4 36.4	DATE=02/15/95	AIR	37.7 37.8 37.9 37.9 38.0 38.0
	REL- TIME	6.98 7.47 7.97	FLAPN0=2509	REL- TIME	-1.50 -0.37 -0.25 0.00	0.60	3.50	4.00 5.00 5.50	6.00 6.50 7.00	FLAPN0=2510	REL- TIME	-0.73 -0.47 -0.17 0.00 1.00 1.50
FLAPNO=2508	ACTL TIME	17:31 18:00 18:30	- FLAPNO	ACTL TIME	10:00 11:08 11:15	12:06 12:30 13:00	14:00 14:35 15:00	15:30 16:00 16:30 17:00	17:30 18:00 18:30	- FLAPNO	ACTL TIME	10:06 10:22 10:40 10:50 11:20 12:20 12:50
	TARG	17:30 18:00 18:30	0 0 0 0 0 0 2 2 1 0 3	TARG	10:45 11:00 11:15	12:00 12:30 13:00	14:30 15:00 15:00	15:30 16:00 16:30 17:00	17:30 18:00 18:30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TARG	10:05 10:35 10:35 10:50 11:20 11:50 12:20

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

					•		:		
	OLUC CUM	2.63 2.76 3.02 3.22 3.33 3.33 3.33 3.33		CUM	0.12 0.26 0.47 0.79 1.45 1.45 1.81 2.82 3.24 3.24	3.70 3.92 4.15 4.41	N	GLUC 0.01	•
NCSU=No	GLUC	0.51 0.26 0.26 0.11 0.13 0.17 0.00	NCSU=No	GLUC	0.55 0.55 0.55 0.55 0.62 0.63 0.63	0.44 0.45 0.45 0.52	NCSU=No	UTIL 0.61	•
MEDVOL=304	ADJ RESIS	139.6 155.7 160.4 160.6 163.3 153.9 164.3 172.8	MEDVOL=334	ADJ RESIS	25.0 26.0 26.0 26.0 26.0 26.0 26.0 26.0 26	99.4 96.3 102.4 95.9	MEDVOL=260	RESIS	:
	ADJ FLOW	0.59 0.58 0.58 0.59 0.59 0.55 0.55		ADJ FLOW	7.00.63 0.63 0.65 0.65 0.65 0.63 0.63 0.63	0.56 0.56 0.56 0.60	3	FLOW 0.52	;
GROUP=No Topical	VRE- SIST	81.8 93.9 93.9 95.7 96.2 96.3 105.3	GROUP=No Topical	VRE- SIST	63.3 63.3 63.3 63.3 63.3	64.0 62.0 65.9 61.7	GROUP=No Topical	SIST 35.4	3
	LACT	1.24 1.52 1.34 1.28 2.70 2.05 1.25 1.25		LACT	1.08 1.08 1.06 1.06 1.08 1.08	1.18		DEXT	:
DOSETIME=10:50	DEXT	1.060 1.140 1.190 1.200 1.220 1.230 1.230 1.240 1.240	DOSETIME=11:02	DEXT	0.737 0.737 0.737 0.729 0.663 0.700 0.700 0.734	0.882 0.918 0.928 0.938	DOSETIME=10:25	ROSV 0.535	1
DOSETIM	LACT ATEV	0.307 0.220 0.184 0.165 0.158 0.145 0.149 0.149	DOSETIM	LACT	0.238 0.247 0.288 0.280 0.323 0.377 0.378 0.376 0.376	0.285 0.265 0.280 0.280	DOSETI	ATEV 0.289	
FLAPWT=27.7 ontinued)	DEXT	1.290 1.270 1.310 1.270 1.290 1.330 1.290	FLAPWT=26.1	DEXT	0.937 0.937 1.070 1.030 1.020 1.030 1.040	1.100 1.130 1.150	FLAPWT=24.2	ROSA	
:1 FLAPWT=2 (continued)	LACT	0.022 0.022 0.023 0.023 0.023 0.023 0.022 0.022		LACT	0.017 0.018 0.018 0.019 0.019 0.019	0.022 0.020 0.020 0.020		ATEA 0.015	2
PHASE=1 (cc	MEAN	1.02 0.97 0.99 1.01 1.04 1.01 0.97 0.94	PHASE=1	MEAN	0.95 0.95 0.95 0.95 0.95 0.96	0.88 0.92 0.87 0.94		FLOW 1.05	3
ANIMAL/SIDE=95-21-2-L	MED	37.3 37.3 37.3 37.3 37.4 36.2	DE=95-22-1-R	MED	35.2 37.2 37.2 37.2 37.2 37.2 37.2	36.8 36.8 36.9 37.1	1DE=95-22-1-L	TEMP	
/SIDE=9	BP	83 83 83 84 84 85 83 83 83 83 83 83 83 83 83 83 83 83 83	/SIDE=9	BP MEAN	7 2 2 2 3 2 4 4 4 4 4 6 8 4 4 8 6 4 8 6 4 8 6 8 6 8	56 57 58	./SIDE=9	MEAN 37	ñ
ANIMAL	ART MEDPH	7.55	ANIMAL/SI	ART			ANIMAL/S	MEDPH	:
	HUMI	36.1 35.5 36.5 37.3 37.4 36.4 37.7	16/95	HUMI	24.3 31.0 31.0 40.7 40.7 27.2 36.0 36.1	36.8 36.9 36.0	716/95	DITY A 5	3
DATE=02/15/95	AIR	38.0 38.0 38.0 38.0 38.0 38.0 37.9 38.1	DATE=02/16/95	AIR	24.0 26.0 26.0 26.0 26.0 26.0 26.0 26.0 26	36.6 36.7 37.3 36.9	DATE=02/16/95	AIK TEMP	27.0
	REL- TIME	2.50 3.50 4.50 7.50 7.50 7.50	FLAPN0=2511	REL- TIME	0.053 0.07 0.07 1.47 1.97 2.47 2.97 4.47	5.47 5.97 6.47 6.97	FLAPNO=2512	TIME C.	2.0.
- FLAPNO=2510	ACTL TIME	13:20 14:20 14:52 15:20 15:52 16:50 17:20	- FLAPNC	ACTL TIME	10:16 10:30 11:02 11:03 12:30 13:00 14:30 15:00 15:00	16:00 16:30 17:00 17:30 18:00	- FLAPN	TIME	¥:40
	TARG TIME	13:20 13:50 14:20 14:50 15:20 16:50 17:20		TARG	10:15 10:30 11:30 12:30 13:00 14:30 15:00 15:30	16:00 16:30 17:00 17:30 18:00	1 C	TIME	7:40

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

;			!		
	CUM	0.15 0.37 0.37 1.98 1.98 3.38 4.20 5.74 5.27 6.27		CUM	0.01 0.10 0.15 0.15 0.38 0.47 0.56 0.66 0.93 1.01 1.12 1.29
NCSU=No	GLUC	0.57 0.75 0.75 0.99 0.99 0.93 0.84 0.87 1.22 0.72 0.72	NCSU=No	GLUC	0.00 0.12 0.23 0.23 0.18 0.19 0.18 0.17 0.17 0.17
VOL=260	ADJ RESIS	71.8 66.5 65.5 64.0 64.0 64.0 73.7 73.7 73.7 73.7 73.7 73.7 74.1 114.1	MEDVOL=365	ADJ RESIS	139.2 164.2 168.6 157.7 153.7 168.7 168.7 168.7 168.7 175.6 175.7 110.7 110.7 110.7 110.7 110.7 110.7 110.7 110.7
MED	ADJ FLOW	ananinaaamaaaaaa		ADJ FLOW	0.68 0.68 0.68 0.70 0.62 0.65 0.65 0.65 0.65 0.65
GROUP=No Topical MEDVOL=260	VRE- SIST	36.0 33.0 33.0 33.0 33.0 33.0 33.0 33.0	GROUP=No Topical	VRE- SIST	97.9 115.5 1118.6 1108.1 118.6 109.3 105.4 101.6 89.4 87.7 77.7 77.7 67.8 66.3
GROUP=	LACT			LACT	0.91 0.76 0.76 0.76 0.91 1.13 1.26 1.26 1.26 1.27
DOSETIME=10:25	DEXT	0.505 0.466 0.462 0.413 0.410 0.412 0.437 0.437 0.553 0.553 0.561 0.773	DOSETIME=11:02	DEXT	1.300 1.190 1.170 1.170 1.170 1.190 1.200 1.200 1.220 1.220 1.220 1.220 1.220 1.250
DOSETIM	LACT	0.318 0.344 0.356 0.356 0.376 0.407 0.448 0.448 0.436 0.436 0.319 0.315	DOSETIN	LACT	0.036 0.094 0.137 0.147 0.166 0.176 0.169 0.173 0.165 0.160 0.160 0.160 0.160 0.160 0.160
WT=24.2 ued)	DEXT	0.749 0.767 0.767 0.782 0.737 0.839 0.831 0.857 0.857 0.931 1.100 1.100	FLAPWT=39.2	DEXT	1.060 1.270 1.310 1.320 1.330 1.330 1.330 1.330 1.340 1.340 1.340
PHASE=1 FLAPWT=24.2 (continued)	LACT			LACT	0.022 0.023 0.023 0.022 0.020 0.017 0.017 0.017 0.009 0.009 0.004 0.004
	MEAN	0-000000000000	R PHASE=1	MEAN	0.95 0.97 1.01 0.99 0.98 0.99 0.90 0.90 0.90 1.00
DE=95-22-1-L	MED TEMP	88888888888888888888888888888888888888	DE=95-21-3-R	MED	34.4 36.4 37.1 37.1 37.1 37.3 37.3 37.3 37.3 37.3
	BP MEAN	M M M M M M M M M M M M M M M M M M M	_	BP	2112 1115 1115 1105 1105 1105 1105 1105
ANIMAL/SI	ART Medph	K44-K44.K7777777777777777777777777777777	ANIMAL/S	ART MEDPH	4444444444444444
56/91	HUMI	35.52 35.52 35.52 35.52 35.53	55/62	HUMI DITY	21.7 19.0 42.2 43.1 27.2 38.3 38.3 38.3 38.3 37.5 37.5 35.3 35.3 35.3 35.3 35.3 35
DATE=02/16/95	AIR	88888888888888888888888888888888888888	DATE=02/22/95	AIR TEMP	388.2 388.2 388.3 388.3 388.3 388.5 389.5 399.5
FLAPNO=2512	REL- TIME		FLAPNO=2513	REL- TIME	-0.73 -0.23
FLAPNO	ACTL TIME	2.55 111:55 11:55 14:55 17:55 17:55 17:55 17:55	FLAP	ACTL TIME	10:18 10:33 11:02 11:32 11:32 11:32 12:30 12:30 14:30 15:30 16:30 16:30 17:30 17:30
	TARG	9.00 10:01 11:05 11:05 11:05 12:05 13:05 14:05 14:05 14:05 15:05 16:05 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TARG	10:15 10:30 11:30 11:30 12:30 13:30 14:30 15:30 15:30 16:30 16:30 17:30 18:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	GLUC	0.01 0.01 0.02 0.02 0.07 0.07 0.07 0.07 0.07	0.07	CUM 6LUC 0.01 0.27 0.27 1.36 1.73 2.17 2.44 2.83 3.97 4.63 5.04 5.06
NCSU=No	GLUC UTIL	0.0000000000000000000000000000000000000	0.00 0.00 0.00 NCSU=No	3.40 1.02 0.92 0.92 0.74 0.73 0.73 0.73 0.74 0.75 0.75 0.77 0.77 0.77 0.77 0.77
MEDVOL=418	ADJ RESIS	62.7.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	76 73.6 83 54.5 82 58.7 MEDVOL=386	ADJ RESIS 86.7 66.4 66.4 66.4 58.3 56.0 58.3 56.0 57.7 57.7 67.1 67.1 67.1 67.1 67.1 67.1 67.1 6
	ADJ FLOW	0.81 0.79 0.83 0.82 0.82 0.70 0.70 0.75 0.75 0.82 0.82	000	ADJ 0.69 0.72 0.73 0.73 0.73 0.74 0.74 0.77 0.73
GROUP=No Topical	VRE- SIST	58.2 58.0 58.0 58.2 51.7 66.5 66.5 67.7 67.7 67.7 57.2 57.2 57.5	- 59.3 - 43.9 - 47.3 GROUP=No Topical	VRE- SIST 64.5 49.0 47.7 43.3 41.6 43.3 40.7 43.3 40.7 43.3 43.3 40.7 43.3 40.7 43.3 40.7 43.5 43.6 50.6 50.6 50.6 50.6 50.6 50.6 50.6 50
GROUP=N	LACT	0.70	- - GROUP=N	LACT DEAT 0.08 0.58 0.95 1.05 1.27 1.27 1.27 1.15 1.15 1.15 1.15
DOSET1ME=10:15	DEXT	1.280 1.290 1.300 1.320 1.310 1.310 1.320 1.330 1.330 1.340	1.340 1.350 1.340 E=11:03	DEXT ROSV 0.583 0.794 0.847 0.848 0.875 0.875 0.894 0.893 0.893 0.895 0.896 0.896 0.896 0.896
DOSETIM	LACT	0.031 0.320 0.034 0.035 0.037 0.038 0.038 0.029 0.027 0.027	0.020 1.340 0.018 1.350 0.015 1.340 DOSETIME=11:03	LACT ATEV 0.211 0.311 0.393 0.463 0.465 0.465 0.467 0.427 0.428 0.429 0.429 0.429 0.429 0.328
FLAPWT=20.2	DEXT	1.270 1.290 1.300 1.310 1.320 1.320 1.320 1.320 1.320 1.330	1.340 1.350 1.350 1.340 1.340	ROSA 2.290 1.290 1.270 1.270 1.270 1.240 1.240 1.240 1.230 1.240 1.230 1.230 1.250 1.250 1.250
	LACT	0.020 0.021 0.023 0.023 0.020 0.017 0.017 0.015 0.016	95 0.005 03 0.005 02 0.006 PHASE=1 FL	LACT ATEA 0.066 0.027 0.020 0.019 0.017 0.017 0.015 0.017 0.011 0.011 0.010
L PHASE=1	MEAN	1.01 1.09 1.09 1.02 1.02 0.99 0.95 1.02 1.02 1.02	o	MEAN 1.02 0.95 0.95 0.95 0.95 0.98 0.98 0.98 0.98 0.98 0.98 0.98
IMAL/SIDE=95-21-3-L	MED	8 4 4 7 5 8 8 8 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8	.4 56 36.1 (.4 45 36.0 .4 48 36.1 NIMAL/SIDE=95-22-2-R	MED TEMP 36.3 36.2 36.2 36.2 36.2 36.2 36.2 36.2
/SIDE=	BP	56 57 57 58 58 58 58 58 58 58 58 58 58 58 58 58	56 45 48 11/SIDE	MEAN 60 60 60 67 67 67 67 67 67 67 67 67 67 67 67 67
ANIMAL	ART MEDPH	44688888888444444	7.4 7.4 7.4 ANIM	ARDPH 7.5 7.4 7.4 7.5 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4
22/95	HUMI DITY	34.0 32.0 32.0 32.0 36.5 36.5 36.0 36.0 36.0 37.3 37.3 36.0	35.6 36.1 35.8 36.6 35.9 33.8 0ATE=02/23/95	HUMI DITY 39.2 39.2 39.2 37.4 36.7 36.7 36.7 37.0 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2
DATE=02/22/95	AIR TEMP	4.6.6.6.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.		AIR 36.4 36.5 36.9 37.0 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2
FLAPN0=2514	REL- TIME	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	:15 6.00 :47 6.53 :16 7.02 FLAPNO=2515	TIME -1.05 -0.80 -0.55 -0.30 0.05 -0.55 -0
FLAPN	ACTL TIME	9:30 9:45 10:10 11:45 11:47 11:45 14:45 14:45 14:45 14:45 14:45	16:15 16:47 17:16 FLAP	ACTL 11:00 10:15 10:00 10:15 11:03 1
	TARG	9:53 9:53 11:15 11:15 11:15 13:15 14:15 15:15 15:15 15:15 15:15 15:15 15:15 15:15 15:15	16:15 16:45 17:15	TARG 10:00 10:15 10:15 11:15 11:15 12:45 14:15 15:15 15:15 16:15 17:45 17:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

1	CUM	0.01 0.22 0.36 0.48 1.28 1.61 1.61 2.43 2.23 3.29 4.12 4.74 4.74 6.74 5.19	CUM GLUC 0.01 0.22 0.40 0.57 1.17 1.17 1.154 1.24 2.37 2.37 2.37 2.37 3.93 4.64 5.03 5.03
NCSU=No -	GLUC	1.19 0.50 0.59 0.59 0.78 0.83 0.83 0.84 0.86 0.29 0.29	MCSU=No GLUC UT11. 1.08 0.72 0.73 0.74 0.81 0.82 0.73 0.73 0.73 0.73 0.73 0.73 0.73
MEDVOL=352	ADJ RESIS	97.8 45.2 45.0 45.1 41.7 41.7 41.1 43.7 43.7 48.5 52.1 52.1 68.2 68.5	MEDVOL=419 34 AbJ 34 71.1 36 76.0 36 44.0 37 49.0 37 32.9 38 31.3 37 32.9 37 32.9 37 32.9 38 37.1 37 37.3 38 47.1 38 47.1
	ADJ FLOW	0.61 0.64 0.65 0.65 0.65 0.65 0.67 0.73 0.73 0.67 0.67 0.63	
GROUP≕No Topical	VRE- SIST	66.3 30.7 30.5 30.5 30.0 27.9 27.9 27.9 27.9 46.2 46.2 46.2	GROUP=No Topical LACT VRE- A DEXT SIST FL 0.38 57.4 0.0 0.64 35.5 0.0 0.94 35.8 0.0 0.94 37.3 0.0 0.97 26.7 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 25.3 0.0 0.97 26.1 0.0 0.97 26.1 0.0 0.97 27.1 0.0 0.00 27.1 0.0 0.
GROUP=N	LACT	0.21 -0.10 1.67 1.24 1.23 1.23 1.23 1.14 1.14 1.15	
=10:00	DEXT	0.859 0.943 0.943 1.050 1.050 1.070 1.010 0.976 0.976 0.978 0.976 1.010 1.040 1.120	LACT DEXT ATEV ROSV 0.189 0.754 0.255 0.830 0.265 0.836 0.346 0.837 0.337 0.338 0.834 0.337 0.338 0.348 0.345 0.337 0.338 0.358 0.337 0.338 0.337 0.338 0.337 0.338 0.337 0.338 0.337 0.338 0.337 0.338 0.337 0.338 0.337 0.338 0.337 0.338 0.337 0.338 0.337 0.338 0.338 0.337 0.338 0.347 0.883
DOSETIME=10:00	LACT	0.117 0.213 0.248 0.319 0.387 0.373 0.373 0.378 0.378 0.378 0.378 0.378 0.378 0.378 0.378	LACT ATEV 0.189 0.252 0.265 0.346 0.353 0.373 0.387 0.387 0.381 0.381 0.372 0.372 0.372
FLAPWT=21	DEXT	1.320 1.260 1.200 1.230 1.330 1.250 1.250 1.250 1.260 1.260 1.260 1.260 1.260 1.260 1.260 1.260 1.260 1.250	ACT DEXT TEA ROSA ROSA ROSA ROSA ROSA ROSA ROSA ROS
	LACT	0.022 0.246 0.020 0.020 0.020 0.018 0.016 0.014 0.017 0.010 0.009 0.009	
-L PHASE=1	MEAN	0.91 0.95 0.95 0.98 0.97 0.99 1.08 1.08 0.99 0.99	MEAN FLOW 1.05 0.95 0.96 0.96 0.97 0.98 0.98 0.98 0.99 0.99 0.99 0.99 0.99
SIDE=95-22-2-L	MED	37.6 35.9 35.9 35.1 35.7 35.7 35.7 35.7 35.7 35.7 35.7 35.7	DE=95-24-4-R BP MED IEAN TEMP 60 35.2 58 35.2 35 36.1 37 35.9 31 35.9 31 35.9 31 35.9 28 36.1 27 35.1 27 35.1 28 36.1 28 36.1 28 36.1 28 36.1 28 36.1 28 36.1 28 36.1 28 36.1 28 36.1 28 36.1
	BP MEAN	60 20 20 30 30 30 30 30 30 40 41 43 43 43 43 43 43 43 43 43 43 43 43 43	H I
ANIMAL/	ART MEDPH	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ANIMAL/S ART AEDPH 7.4 7.4 7.5 7.5 7.4 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5
/23/95	HUMI	30.0 42.0 42.1 42.1 42.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0	HUMI DITY 40.0 40.1 37.3 36.9 38.9 38.9 38.9 34.2 34.5 34.8 35.7 34.8 35.7 34.8 35.8 35.8 35.8 36.8 36.8 36.8 37.8 37.8 37.8 37.8 37.8 37.8 37.8 37
DATE=02/23/95	AIR TEMP	37.8 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2	AIR HUM AIR HUM TEMP DIT 36.9 40. 36.4 37. 36.0 40. 36.4 37. 37.2 39. 37.2 39. 37.5 36. 37.5 36. 37.5 36. 37.5 36. 37.5 36. 37.5 36. 37.5 36.
FLAPN0=2516	REL- TIME	-0.73 -0.25 -0.25 -0.25 -0.25 -0.50 -1.50	0.20.20.20.20.20.20.20.20.20.20.20.20.20
FLAPN	ACTL TIME	9:16 9:31 9:45 10:30 11:01 11:31 12:30 13:00 13:30 14:30 15:00 15:30 16:30	FLAPNO=2517 ACTL REI TIME TIII 9:30 -1. 10:30 0.1 11:30 1. 11:30 1. 12:30 2. 13:30 2. 14:30 4. 14:30 4. 15:30 6.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TARG	9:15 9:45 10:00 10:00 11:30 11:30 12:30 13:30 14:30 15:30 15:30 15:30 16:30	TARG 11.86 9:45 9:45 9:45 10:00 11:00 11:30 12:30 12:30 12:30 14:30 15:30 15:30 17:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	SLUC CUM GLUC	0.01 0.18 0.36	0.58	 6 K :	2.58	3.41	3.80	4.61	4.86	5.07	5.37	5.46		SLUC GLUC	0.01	0.25	0.48	200	1.48	2.02	2.44	3.16	3.69	4.14	4.83	5.10	1. v. v.	;
NCSU=No	GLUC	0.82 0.69 0.69	2.9.9	0.93	0.83	0.84	0.79	0.91	0.50	0.43	0.30	0.19	NCSU=Yes	GLUC UTIL	0.88	0.97	0.90	9.0	1.18	1.05	0.85	0.89	1.07	0.93	0.52	0.53	0.44	;
MEDVOL=409	ADJ RESIS	47.9 43.1 41.0	37.3 40.1	36.3	32.5	36.6 39.8	35.2	36.1	42.1	25.4	41.7	40.5	MEDVOL=392	ADJ RESIS	51.3	6.74	7.67	2.25	42.0	56.0	64.8	78.6	50.2	6.15	52.3	50.9	44.1	•
_	ADJ FLOW	0.84 0.81 0.78	8.7.8	0.80	0.79	0.30	0.80	0.78	0.81	0.74	200	0.82		ADJ FLOW	0.74	0.79	0.80	0.7	0.88	0.71	0.7	0.74	0.74	0.75	0.61	0.67	200	•
GROUP=No Topica	VRE- SIST	37.7 34.0 32.3	29.4 31.6	7.82.4 7.9.6	28.0	31.4	27.7	28.4	33.2	41.3	32.8	31.9	GROUP=No Topical	VRE- SIST	38.8	36.2	37.6	4.65	31.8	42.3	33.8	36.7	37.9	39.2	39.5	38.4	33.3	;
GROUP=	LACT	0.61 0.70 0.87	0.92	0.98	1.05	1.13	1.03	0.83	96.0	0.95	1, 12	1.70	_	LACT	0.39	0.62	0.80	0.0	1.00	0.93	1.22	1.13	96.0	1.00	1.32	1.22	1.58	•
DOSETIME=10:15	DEXT	0.906 0.962 0.930	0.858	0.819	0.855	0.849	0.875	0.854	0.989	0.994	1.070	1.100	DOSETIME=11:45	DEXT ROSV	0.892	0.872	0.903	0.920	0.813	0.810	0.814	0.796	0.755	0.837	0.882	0.931	0.955	> 1
DOSETIA	LACT	0.225	0.373	0.414	0.382	0.404	0.363	0.348	0.218	0.201	0.158	0.147		LACT	0.172	0.269	0.315	0.327	0.457	0.469	0.479	0.466	0.475	0.423	0.384	0.334	0.307	0.675
FLAPWT=25.8	DEXT	1.240 1.250 1.230	1.240	1.220	1.210	1.210	1.210	1.250	1.200	1.190	1.200	1.180	FLAPWT=25.98	DEXT	1.280	1.270	1.270	1.260	1.250	1.290	1.190	1.190	1.230	1.240	1.160	1.190	1.140	2
	LACT	0.020 0.021 0.020	0.021	0.020	0.019	0.019	0.018	0.018	0.016	0.014	0.0	0.011	_	LACT	0.022	0.021	0.022	0.021	0.022	0.022	0.021	0.020	0.021	0.021	0.018	0.018	0.015	
PHASE=1	MEAN	1.06	0.95	22.8	88	1.01	1.01	6.0	1.03	0.95	6.0	1.04	PHASE=1	MEAN	0.98	1.05	1.07	1.02	1.17	0.95	0.98	0.98	0.98	9 8	0.81	0.8	1.02	
MAL/SIDE=95-24-4-L	MED	35.3 36.2 36.3	36.3 36.3	36.6	36.6	36.7 36.8	36.8	36.9	36.6	36.4	36.4	36.4	SIDE=95-24-1-R	MED TEMP	39.7	36.9	38.2	37.8	37.8	37.9	38.0	37.9	38.0	37.9	37.9	37.8	37.9	
/SIDE=9	BP	40 35 32	ន្តន	8 62	8 2	32	8 8	8 8	34	36	2 6	33	SIDE=9	BP MEAN	33	38	70	0 5	37	40	33	8 8	37	3 2	32	% t	4 4 5	ţ
ANIMAL	ART MEDPH	7.5	7.5	4.6	7.3	7.3	7.4		7.3	7.4	7.7	7.5	ANIMAL/	ART MEDPH	7.4	7.3	7.4	7.4	7.7	7.5	7.5	7.7	7.5	7.4	7.5	7.4	4.7	:
01/95	HUMI	40.3 40.1 40.4	39.6	39.1	36.3	35.0	35.1	34.6	34.6	34.2	36.6	32.4		HUMI	37.0	37.5	38.0	37.4	35.7	35.7	37.0	37.0	37.2	37.0	34.3	33.5	33.7	2
DATE=03/01/95	AIR	35.1 37.6 36.4	35.9	36.1 36.1	36.1	36.1 36.2	36.2	36.2	36.2	36.0	36.0	35.9	DATE=03/16/95	AIR	40.4	38.0	39.0	38.6	38.5	38.7	38.7	38.7	38.8	38.1 38.1	38.3	38.3	38.4	2
	REL- TIME	-1.00 -0.75 -0.50	0.00	30.5	2.00	3.50	3.50	4.50	2.00	2.50	20.00	7.00		REL- TIME	-1.00	-0.75	-0.50	-0.23	0.50	1.02	1.52	2.52	3.02	3. 50	4.50	r, r,	6.02	2
· FLAPNO=2518	ACTL TIME	9:15 9:30 9:45	10:00 10:15	11:15	11:45	12:45 13:15	13:45	14:45	15:15	15:45	16-45	17:15	FLAPNO=2521	ACTL TIME	10:45	11:00	11:15	11:30	12:15	12:46	13:16	14:16	14:46	15:15	16:15	16:45	17:46	0:0
	TARG	9:15 9:30 9:45	10:00	11:15	11:45	12:45	13:45	14:45	15:15	15:45	16:15	17:15		TARG	10:45	11:00	11:15	11:30	12:15	12:45	13:15	15:45	14:45	15:15	16:15	16:45	17:45	10:01

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	5.76		CUM	0.01	0.35	05.0	1.09	1.56	2.34	2.72	2.50 82.80	4.24	4.80	7.57	5.88 7.7	6.3	7.15		OLUC	0.01 0.30 0.49 0.71 1.18 1.61 2.03
NCSU=Yes	GLUC UTIL	0.41	NCSU=Yes	GLUC	0.81	69.0	0.62	0.84	0.91	0.83	0.75	1 25	0.82	1.12	1.14	9.0	8.0	0.73	NCSU=No -	GLUC	0.37 0.47 0.71 0.72 0.94 0.86 0.86
MEDVOL=392	ADJ RESIS	9.74	MEDVOL=339	ADJ RESIS	58.2	45.3	51.0	43.3	38.4	6.74	39.7	6. 67	42.1	46.2	7.75	49.0 48.7	56.8	41.7	MEDVOL=404	ADJ RESIS	60.2 74.6 65.2 71.2 76.2 67.1 53.4 62.4
	ADJ FLOW	0.71		ADJ FLOW	0.65	5.0	9.0	0.69	5.3	0.65	0.63	29.0	0.62	0.65	9.0	20.0	0.63	0.62	HD MED	ADJ FLOW	0.81 0.72 0.75 0.77 0.79 0.67
GROUP=No Topical	VRE- SIST	36.0	GROUP=No Topical	VRE- SIST	38.0	29.6	28.0	28.3	25.1	31.3	25.9	29.3	27.5	30.2	30.8	32.0 25.4	37.1	27.2	GROUP=3 mg H	VRE- SIST	46.9 58.1 50.8 55.4 59.3 52.2 41.6 48.6
GROUP=N	LACT	1.41	GROUP=N	LACT	0.68	0.86	0.97	0.98	1.04	1.26	1.57	1.24	1.34	0.99	0.97	. 6	- 1	1.43		LACT	1.03 1.03 1.06 1.05 1.05 1.05
E=11:45	DEXT	0.990	E=11:15	DEXT	0.863	0.954	0.953	0.848	0.818	0.709	0.658	0.603	0.651	299.0	0.673	0.669	0.702	0.713	DOSETIME=9:45	DEXT	1.030 0.999 0.891 0.815 0.815 0.817 0.794
DOSETIME=11:45	LACT	0.281	DOSETIME=11:15	LACT	0.289	0.284	0.308	0.403	0.437	0.540	0.614	0.636	0.591	0.564	0.556	0.572	0.521	0.551		LACT	0.180 0.237 0.347 0.350 0.436 0.447 0.389 0.451
FLAPWT=25.98 continued)	DEXT	1.180	FLAPWT=29.51	DEXT	1.260	1.260	1.250	1.240	1.220	1.120	1.040	1.100	1.080	1.220	1.230	1.180	130	1.090	FLAPWT=25.2	DEXT	1.280 1.210 1.200 1.200 1.200 1.210 1.210
3	LACT	0.013		LACT	0.021	0.020	0.020	0.020	0.019	0.022	0.016	0.018	0.016	0.018	0.016	0.013	0.0	0.012	PHASE=2 F	LACT	0.020 0.020 0.020 0.021 0.021 0.020 0.019 0.019
PHASE=1	MEAN	0.95	PHASE=1	MEAN	1.00	1.12	1.04	1.06	1.12	0.92	26.0	96.0	0.95	1.00	1.0	9.0	0.0	0.96		MEAN	1.05 0.93 0.98 1.00 1.01 0.87
L/SIDE=95-24-1-R	MED	37.9	1L/SIDE=95-24-1-L	MED	35.6	35.6	36.3 26.5	36.5	36.6	37.3	37.4	37.2	37.2	37.2	37.2	37.2	37.75	37.3	IMAL/SIDE=95-201-11-R	MED	36.7 37.8 38.2 38.2 37.9 38.3 38.3 38.4
1DE=95	BP MEAN	34	31DE=95	BP MEAN	38	3 25	8 8	4 R	82 5	3 5	52	, 28	8 8	30	<u>M</u>	22 12	3 %	8 8	L/SIDE=	BP MEAN	454 23 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
ANIMAL/9	ART MEDPH	9.2	ANIMAL/	ART	7.4	7.4	7.4	.5:	7.5		2.5	7.4	. 4.	7.4	7.5	7.5		7.5	ANIMA	ART MEDPH	7.7.3
	HUMI	33.7		HUMI	27.8	40.6	41.4	41.8	41.8	42.3	45.0	42.1	4.0.0	9.04	40.5	0.04	7.04	41.2	/22/95	HUMI	38.8 35.3 35.4 35.2 35.2 35.2 35.0
DATE=03/16/95	AIR TEMP	38.4	DATE=03/16/95	AIR	35.2	36.3	37.1	37.4	37.4	37.9	37.8	37.7	37.7	37.7	37.7	37.7	37.8	37.7	DATE=03/22/95	AIR	37.7 38.9 38.9 38.7 38.0 39.0
	REL- TIME	7.00		REL- TIME	-0.97	-0.50	-0.25	0.50	1.02	2.00	2.50	w. 6	4.00	4.50	2.00	2.50	9.5	2.00	FLAPN0=2523	REL- TIME	-1.00 -0.75 -0.50 -0.25 -0.25 -0.50 1.00 1.50 2.00
FLAPN0=2521	ACTL TIME	18:45	FLAPNO=2522	ACTL TIME	10:17	10:45	11:00	11:45	12:16	12:45	13:45	14:15	15:15	15:45	16:15	16:45	17:45	18:15	FLAPN	ACTL TIME	8:45 9:00 9:15 9:45 10:15 11:15
	TARG	18:45	† 4 2 4 1 1	TARG	10:15	10:45	11:00	11:45	12:15	12:45	13:45	14:15	15:15	15:45	16:15	16:45	17:15	18:15		TARG	8:45 9:00 9:15 9:45 10:15 11:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	2.82 3.17 3.17 3.17 5.17 5.17 5.17 5.17 5.17 5.17 5.17 5	6.16
NCSU=No	GLUC UT1L	0.77 0.62 0.62 0.63 0.63 0.63 0.63 0.63	0.53
MEDVOL=404	ADJ RESIS	69.2 66.0 65.0 57.1 57.5 58.0 64.9 64.9	67.3
	ADJ FLOW	0.75 0.66 0.77 0.77 0.78 0.78 0.78	0.73
GROUP=3 mg HD	VRE- SIST	533.9 501.4	52.4
_	LACT	1.00 0.97 1.14 1.03 1.09 1.09 0.98	1.08
DOSETIME=9:45	DEXT ROSV	0.893 0.928 0.913 0.944 0.954 0.962 0.963 0.972 0.972	1.010
	LACT	0.356 0.331 0.316 0.297 0.297 0.291 0.290	0.265
FLAPWT=25.2 inued)	DEXT	1.230 1.220 1.220 1.220 1.220 1.230 1.230 1.230	1.250
PHASE=2 F (contin	LACT	0.019 0.018 0.015 0.013 0.010 0.010 0.009	0.005
	MEAN	0.97 0.98 0.98 0.99 0.93 0.93	0.94
'SIDE=95-201-11-R	MED TEMP	38.4 38.1 38.1 38.0 37.0 37.1 37.1 37.1 37.1	37.1
IL/SIDE	BP	224 444 466 467 474 474 474 474 474 474 47	4 64
ANIMA	ART Medph	4444455555	7.5
3/22/95	HUMI	34.2 33.6 34.2 35.4 35.4 35.4 35.4 35.4	33.3
DATE=03/22/95	AIR	38.8 38.7 38.7 37.7 37.7 37.7 37.7 37.8	37.8 37.8
FLAPN0=2523	REL- TIME	2.50 3.50 4.50 5.50 6.00 6.00 6.00	8.00
- FLAPA	ACTL TIME	12:15 13:15 13:15 14:15 14:15 15:15 15:15 16:15	17:16 17:45
	TARG	12:15 13:45 13:45 14:15 14:45 15:15 16:15	17:15

	CUM	GLUC	0.01	0.12	0.24	0.42	0.55	0.89	1.22	1.60	1.98	2.37	2.62	2.91	3.15	3.41	3.58	3.73	3.85	3.97	4.13	4.29	4.46	
NCSU=Yes -	GLUC	UTIL	0.36	0.45	0.47	0.61	0.71	99.0	0.65	0.77	92.0	0.78	0.50	0.58	0.50	0.52	0.33	0.30	0.24	0.24	0.31	0.32	0.35	
MEDVOL=381	ADJ	RESIS	38.5	45.9	36.5	35.6	31.4	38.5	36.7	33.5	34.4	43.3	4.44	43.3	57.9	51.8	65.3	52.3	61.3	54.5	60.1	56.1	54.2	
	ADJ	FLOW	0.70	0.72	0.71	0.73	0.80	0.68	0.65	0.72	0.70	0.72	0.63	0.72	0.71	5.0	0.72	0.73	0.70	0.70	0.75	0.77	0.79	
GROUP=3 mg HD	VRE-	SIST	28.3	31.5	26.8	26.1	23.0	28.3	27.0	54.6	25.3	31.8	32.6	31.8	45.5	38.0	48.0	38.4	45.0	0.04	44.1	41.1	39.8	
	LACT	DEXT	26.0	1.00	1.04	1.1	1.08	1.05	1.07	1.02	1.04	1.01	1.04	1.04	1.01	0.98	0.98	1.1	1.01	1.1	1.04	1.12	1.08	
DOSETIME=9:29	DEXT	ROSV	996.0	0.929	0.915	0.837	0.811	0.789	0.769	0.744	0.740	0.738	0.869	0.859	0.916	0.925	1.040	1.050	1.080	1.080	1.050	1.050	1.030	
	LACT	ATEV	0.237	0.291	0.316	0.422	0.439	0.463	0.482	767.0	0.510	965.0	0.372	0.382	0.323	0.315	0.210	0.212	0.163	0.178	0.199	0.211	0.212	
FLAPWT=35.47	DEXT	ROSA	1.190	1.200	1.200	1.200	1.200	1.210	1.200	1.210	1.210	1.210	1.210	1.210	1.220	1.230	1.240	1.230	1.230	1.230	1.230	1.230	1.220	
PHASE=2 FL	LACT	ATEA	0.020	0.021	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.017	0.016	0.016	0.016	0.015	0.014	0.013	0.012	0.012	0.011	0.009	0.006	
	MEAN	FLOW	96.0	0.99	0.97	9.	1.09	0.92	0.89	0.98	0.95	0.98	98.0	0.98	0.97	1.00	0.98	0.99	96.0	0.95	1.02	1.05	1.08	
7-201-11-L	WED	TEMP	35.8	37.2	36.7	36.4	37.0	36.3	36.8	36.8	36.8	36.8	36.8	35.4	36.1	36.0	36.1	36.1	36.1	36.1	36.1	36.2	36.2	1
/S1DE=95	å	MEAN	27	31	92	56	52	56	54	54	54	31	28	31	41	38	47	38	43	38	45	73	73	!
ANIMAL	ART	MEDPH	7.2	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.4	7.4	•
22/95	HUMI	DITY	41.1	45.4	45.0	45.0	6.04	34.4	35.7	33.4	34.3	34.1	34.4	38.2	36.0	35.8	34.4	38.9	37.1	36.4	35.5	35.9	37.9	
DATE=03/22/95	AIR	TEMP	36.9	37.9	37.6	37.6	37.9	37.3	37.6	37.5	37.5	37.5	37.5	36.5	36.7	36.6	36.7	36.7	36.7	36.7	36.7	36.8	36.9	
	REL-	TIME	-0.98	-0.73	-0.48	-0.18	0.00	0.52	1.02	1.52	2.05	2.52	3.02	3.52	4.02	4.52	5.05	5.52	6.02	6.50	7.02	7.53	8.02	
FLAPNO=2524	ACTL	TIME	8:30	8:45	00:6	9:18	9:29	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	15:59	16:30	17:01	17-30)
	TARG	TIME	8:30	8:45	00:6	9:15	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17.30	2

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	0.01 0.20 0.38 0.78 0.78 0.78 0.77	.50 .50
	ი <u>ყ</u>	99999449VWW4444WW444	7
NCSU=Yes	GLUC	0.77 0.75 0.75 0.82 1.15 0.98 0.89 0.86 0.88 0.78 0.78 0.78	0.62
MEDVOL=433	ADJ RESIS	53.3 85.7 85.7 48.7 48.7 40.2 40.2 40.2 40.8 41.0 42.9 43.9 43.9	41.4
_	ADJ FLOW	0.84 0.88 0.77 0.80 0.77 0.81 0.81 0.83 0.83 0.84 0.85 0.85 0.85 0.85 0.85 0.85	0.82
GROUP=3 mg HD	VRE- SIST	44.4 71.5 43.9 37.6 37.6 37.6 37.6 37.0 37.0 37.0 36.0 36.0 36.0	34.5 36.0
	LACT	0.64 0.83 0.90 0.94 0.97 0.93 0.98 0.98 0.98 0.98 0.98	0.90
DOSETIME=10:44	DEXT ROSV	0.888 0.906 0.857 0.847 0.847 0.834 0.821 0.821 0.821 0.827 0.828 0.928 0.928	0.971
	LACT	0.224 0.269 0.302 0.342 0.377 0.388 0.411 0.411 0.388 0.388 0.388 0.364 0.364 0.278	0.231
FLAPWT=23.72	DEXT	1.210 1.210 1.210 1.210 1.200 1.210 1.210 1.220 1.220 1.220 1.220 1.220 1.220	1.220
	LACT	0.018 0.018 0.018 0.018 0.017 0.017 0.013 0.007 0.006 0.007 0.007 0.007 0.007	0.006
R PHASE=2	MEAN	0.95 0.94 0.94 0.93 0.93 0.96 0.98 0.98 0.98 1.01 1.01	0.99
IDE=95-202-7-R	MED	35.9 36.2 36.2 36.2 36.1 36.1 36.1 36.1 36.1 36.1 36.1 36.1	36.1 36.0
"	BP MEAN	25 25 25 25 25 25 25 25 25 25 25 25 25 2	34
ANIMAL/	ART	2444444444444 244444444444444	7.5
	HUMI	35.5.2 35.5.2 35.5.3 35.5 35.5 35.5 35.5 35.5 35.5 35.5 35	34.0 33.9
DATE=03/23/95	AIR	36.9 36.9 37.6 37.6 37.0 37.0 36.9 36.9 36.9 36.9 36.9 36.9 36.9 36.9	36.9
FLAPNO=2525 [REL- TIME	0.03 0.03	7.52 8.02
- FLAPNO	ACTL	9:45 10:00 10:15 10:30 10:44 11:45 12:45 12:45 14:45 14:45 16:45 16:45 16:45 17:45	18:15 18:45
	TARG	9.45 10:00 10:10 10:13 10:13 12:15 12:15 14:15 15:15 16:15 17:15 16:15 17:15 16:15	18:15

:																
	SLUC	0.01	0.20	0.26	0.32	0.48	0.59	0.71	0.83	0.92	0.98	1.05	1.10	1.14	1.17	1.19
NCSU=No	GLUC UTIL	0.25	0.37	0.27	0.23	0.31	0.22	0.25	0.23	0.18	0.11	0.16	0.10	0.08	90.0	0.04
MEDVOL=450	ADJ RESIS	70.3	84.7	2.1.5	21.5	80.8	9.74	43.8	45.7	45.3	39.0	38.8	41.7	37.4	36.9	34.5
MEDVO	ADJ FLOW	0.85	0.82	0.86	0.87	0.85	0.82	0.87	0.87	0.88	0.87	0.85	0.86	0.83	0.84	0.90
GROUP=E tOH	VRE- SIST	60.9	73.4	70.7	9.02	70.1	41.3	38.0	37.0	36.6	33.8	33.7	36.2	32.5	32.0	30.0
	LACT	0.60	0.89	1.08	.18	.09	1.22	1.15	1.15	1.54	1.96	1.19	1.24	1.57	1.53	2.40
DOSETIME=10:29	DEXT	1.090	1.020	1.070	1.100	1.060	1.100	1.090	1.100	1.126	1.150	1.150	1.170	1.180	1.190	1.190
	LACT	0.091	0.187	0.159	0.147	0.180	0.150	0.153	0.140	0.142	0.110	0.108	0.073	0.073	0.056	0.058
FLAPWT=28.59	DEXT	1.210	1.210	1.200	1.210	1.210	1.210	1.210	1.210	1.210	1.200	1.230	1.220	1.220	1.220	1.210
PHASE=2 F	LACT	0.019	0.018	0.018	0.017	0.017	0.016	0.015	0.013	0.013	0.012	0.013	0.011	0.010	0.010	0.010
	MEAN	0.99	0.94	0.99	1.01	0.99	0.95	1.00	1.00	1.01	1.01	0.98	1.00	96.0	0.97	1.04
/SIDE=95-202-7-L	MED	35.9	35.9	35.9	36.8	36.8	36.9	37.1	37.1	37.1	37.1	36.9	37.1	37.0	36.9	36.9
	BP	09	69	2	7	69	36	38	37	37	34	33	36	31	31	31
ANIMA	ART Medph	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
DATE=03/23/95	HUMI	35.3	35.0	35.0	35.0	34.4	34.4	34.4	35.0	34.9	34.1	34.5	33.3	34.1	33.7	33.8
DATE=(AIR	37.0	37.4	37.4	37.6	37.5	37.5	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.7
FLAPNO=2526	REL- TIME	-0.98	-0.48	-0.23	0.00	0.52	1.02	1.52	2.02	2.52	3.07	3.52	4.02	4.52	5.02	5.52
FLAP	ACTL TIME	05:6	10:00	10:15	10:29	11:00	11:30	12:00	12:30	13:00	13:33	14:00	14:30	15:00	15.30	16:00
	TARG	9:30	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15.30	16:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

;			:				1	
1 1 1 1 1	CUM	1.20 1.21 1.25 1.25		CUM	0.01 0.32 0.88 1.50 2.10 2.64 3.51	5.87 4.20 7.79 5.37 5.37 5.44 6.48	GLUC	0.01 0.28 0.58 0.88 1.20
NCSU=No	GLUC	0.02 0.02 0.06 0.06	NCSU=Yes	GLUC	1.25 1.12 1.24 1.24 1.08 1.08	0.73 0.64 0.65 0.56 0.56 0.55 0.55	NCSU=No GLUC UTIL	1.11 1.07 1.20 1.21 1.28
MEDVOL=450 A	ADJ RESIS	36.9 36.1 35.2 35.2	MEDVOL=245	ADJ RESIS	67.2 71.3 74.3 74.3 73.5 71.0 80.3	88.3 80.8 81.7 82.5 80.7 82.1 78.4 74.5	MEDVOL=316 ADJ ADJ .OW RESIS	58.7 58.0 51.5 55.6 54.7
MEDVO	ADJ FLOW	0.84 0.86 0.85 0.88 0.88		ADJ FLOW	64.0 64.0 64.0 64.0 64.0 64.0 64.0 64.0	0.45 0.46 0.45 0.45 0.45 0.45	~ =	0.63 0.62 0.59 0.59 0.58
GROUP=EtOH	VRE- SIST	32.0 31.3 31.7 30.5 32.0	GROUP=3 mg HD	VRE- SIST	33.7 33.7 35.1 34.7 33.8 33.5 37.5	38.1 38.1 38.1 39.4 37.0 35.2	GROUP=3 mg HD ACT VRE-	35.7 35.3 31.4 33.8 35.4
	LACT	3.00		LACT	0.95 1.02 1.02 1.06 1.04	1.06 1.06 1.06 1.06 1.06 1.02		0.82 0.92 0.97 0.94 0.95
DOSETIME=10:29	DEXT	1.190 1.220 1.210 1.190	DOSETIME=11:45	DEXT	0.629 0.697 0.680 0.706 0.742 0.803 0.856	0.889 0.914 0.926 0.938 0.957 0.953 0.959 0.962	DOSETIME=11:15 LACT DEXT L/ ATEV ROSV DI	0.676 0.687 0.632 0.611 0.601
	LACT	0.038 0.046 0.044 0.042 0.030		LACT	0.550 0.522 0.529 0.510 0.517 0.544 0.392	0.320 0.292 0.268 0.256 0.244 0.237 0.222 0.222		0.419 0.454 0.530 0.547 0.572
PHASE=2 FLAPWT=28.59 (continued)	DEXT	1.200 1.220 1.220 1.220 1.210	FLAPWT=23.11	DEXT	1.190 1.180 1.170 1.170	1.180 1.170 1.170 1.180 1.170 1.160	PHASE=2 FLAPUT=26.96 AN LACT DEXT OW ATEA ROSA	1.160 1.160 1.160 1.170 1.180
ASE=2 FLAPW (continued)	LACT	0.008 0.007 0.008 0.007		LACT	0.019 0.019 0.017 0.016 0.011	0.009 0.009 0.008 0.008 0.008 0.008	E=2 FLA LACT ATEA	0.021 0.020 0.020 0.020 0.020 0.019
	MEAN	0.97 0.99 0.95 1.02 0.97	-R PHASE=2	MEAN	1.04 0.98 0.98 0.98 0.99	0.95 0.95 0.95 0.95 0.96 1.00		1.04 1.02 1.02 0.98 0.99
SIDE=95-202-7-L	MED TEMP	37.0 37.1 36.9 36.9	DE=95-206-6-R	MED	37.25.25.25.25.25.25.25.25.25.25.25.25.25.	37.3 37.4 37.5 37.5 37.6 37.6 37.6	DE=95-205-6-R SP MED M SAN TEMP F	36.4 36.6 36.6 36.6 36.8
AL/SIDE	BP MEAN	31	/S1DE=9	BP MEAN	3833473333	33 33 33 33 33 33 33 33 33 33 33 33 33		33 33 34 34 34 34
ANIMAL/	ART Medph	2.2.2.2	ANIMAL/SI	ART MEDPH	2.	44.5.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7	ANIMAL/S ART MEDPH M	445.55
DATE=03/23/95	HUMI	34.0 33.8 34.0 34.0	29/95	HUMI	36.7 33.1 31.8 35.3 34.0 34.3	32.5 34.0 34.8 33.6 34.6 34.6	730/95 HUMI DITY	36.3 34.4 35.2 34.9 34.9
	AIR	37.8 37.7 37.7 37.7 37.7	DATE=03/29/95	AIR	36.8 37.6 37.6 37.7 37.6 37.6 37.6	37.5 37.6 37.6 37.6 37.6 37.6 37.6	DATE=03/30/95 AIR HUMI TEMP DITY	37.8 37.0 37.2 37.2 37.4
FLAPNO=2526	REL- TIME	6.02 6.52 7.02 7.52 8.02		REL- TIME	-0.25 0.00 1.00 2.00 3.50 3.50	8.02 8.02 8.02 8.02	FLAPNO=2529 ACTL REL- TIME TIME	-1.00 -0.75 -0.50 -0.25 0.00
··· FLAP	ACTL TIME	16:30 17:00 17:30 18:00 18:30	- FLAPNO=2527	ACTL TIME	11:30 11:45 12:45 13:15 13:45 14:45	15:15 15:45 16:15 17:15 17:45 18:15 18:45 19:16	- FLAPNC ACTL TIME	10:15 10:30 10:45 11:00 11:15
1	TARG	16:30 17:00 17:30 18:00 18:30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TARG	11:30 12:15 12:15 13:15 13:15 14:15	15:15 16:45 17:15 17:15 18:15 19:15	TARG	10:15 10:30 10:45 11:00 11:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS
USING SHADY SIDE PIGS AND SIGMA BSA

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	SLUC	2.20 3.38 3.38 3.38 3.38 5.17 5.17 6.66 6.66 7.29 7.29 7.29		CUM	0.01 0.77 0.77 0.77 1.49 3.58 4.48 5.63 5.63 6.27 6.27 6.27
NCSU=No	GLUC	1.18 1.00 1.00 1.00 1.83 1.86 1.87 1.88 1.89 1.89 1.69 1.69 1.69	NCSU=Yes -	GLUC	0.81 0.97 0.99 0.99 1.06 1.06 1.05 0.98 0.73 0.73 0.65 0.65
MEDVOL=316	ADJ RESIS	62.2 799.4 69.5 67.3 71.3 71.3 67.1 67.1 85.6 85.6	MEDVOL=359 N	ADJ RESIS	48.4 47.5 47.5 47.5 47.5 47.5 47.5 47.5 47
	ADJ FLOW	0.58 0.64 0.64 0.64 0.64 0.58 0.58 0.58 0.58	MEDVO	ADJ FLOW	0.70 0.73 0.74 0.65 0.65 0.65 0.65 0.65 0.65 0.65 0.65
GROUP=3 mg HD	VRE- SIST	37. 27. 27. 27. 27. 27. 27. 27. 27. 27. 2	GROUP=EtOH	VRE- SIST	33.5 33.3 31.4 29.7 29.7 27.7 27.7 27.7 26.6 26.6 28.7 30.9 30.9 35.1 37.4 36.8 36.8 36.8
	LACT	1.03 1.03 1.00 1.00 1.00 1.00 1.00 1.00		LACT	1.05 1.00 1.01 1.00 1.00 1.00 1.00 1.00
DOSET1ME=11:15	DEXT	0.601 0.662 0.692 0.739 0.772 0.810 0.810 0.819 0.831 0.815 0.855 0.855	DOSETIME=10:28	DEXT	0.688 0.633 0.603 0.586 0.584 0.576 0.602 0.649 0.649 0.727 0.806 0.928 0.928
	LACT	0.593 0.522 0.438 0.433 0.376 0.376 0.376 0.359 0.324 0.287		LACT	0.482 0.545 0.545 0.569 0.576 0.628 0.570 0.574 0.514 0.504 0.504 0.504 0.365 0.365
WT=26.9	DEXT	1.160 1.170 1.170 1.170 1.180 1.160 1.160 1.170	FLAPWT=33.35	DEXT	1.130 1.150 1.150 1.150 1.170 1.160 1.180 1.170 1.170 1.170 1.190 1.190 1.190
PHASE=2 FLAPWT=26.96 (continued)	LACT	0.017 0.014 0.002 0.003 0.005 0.005 0.004 0.004 0.003 0.003	PHASE=2 FL	LACT	0.009 0.020 0.020 0.019 0.018 0.018 0.013 0.009 0.009 0.008 0.008 0.008
	MEAN	0.95 0.89 1.06 1.06 1.01 1.05 1.05 0.98 0.96 0.96		MEAN	1.02 1.02 1.02 1.02 1.03 1.03 1.00 0.94 0.94 0.97
IDE=95-205-6-R	MED	36.8 36.8 36.8 36.8 36.8 36.8 36.8 36.8	SIDE=95-205-6-L	MED	35.8 36.8 36.8 37.1 37.1 37.2 37.2 37.3 37.3 37.3 37.3 37.3 37.3
SIDE=9	BP MEAN	33 33 38 38 38 38 38 38 38 38 38 38 38 3	-/SIDE=	BP MEAN	25 25 25 25 25 25 25 25 25 25 25 25 25 2
AN IMAL/S	ART MEDPH	277 277 277 277 277 277 277 277 277 277	ANIMAL/	ART MEDPH	
	HUMI DITY	34.0 35.1 35.4 35.5 35.0 37.3 37.6 37.6 37.0	30/95	HUMI	34.5 34.5 34.5 34.5 34.5 34.5 34.5 34.5
DATE=03/30/95	AIR	337.2 337.2 337.2 337.2 347.3 37.3 37.3 37.3	DATE=03/30/95	AIR TEMP	36.9 37.8 37.9 38.0 38.1 38.1 37.9 37.9 37.9 38.1 38.1 38.1 38.1
	REL- TIME	1.00 1.50 2.50 3.00 3.50 4.00 6.50 6.50 7.50		REL- TIME	0.97 -0.47 -0.47 -0.47 -0.22 -0.23 -0.03 -
FLAPNO=2529	ACTL TIME	12:15 13:15 13:15 14:15 14:15 15:15 16:15 17:15 18:15 19:00	- FLAPNO=2530	ACTL TIME	9:30 9:45 10:15 10:15 10:28 11:30 11:30 11:30 11:30 11:30 11:30 11:30 11:30 11:30 11:30 11:30
	TARG	12:15:15:15:15:15:15:15:15:15:15:15:15:15:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TARG	9:30 9:45 10:15 10:15 10:30 11:30 12:30 13:30 14:30 15:30 16:30 16:30 16:30 17:30 18:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CUM	0.01 0.23 0.38 0.58 0.58 1.75 1.75 1.75 1.75 1.75 1.75 1.75 1.75	CUM GLUC 0.01 0.01 0.01 0.04 0.44 0.62 0.78 0.78 1.24 1.24
NCSU=Yes -	011L 010C	0.70 0.69 0.79 0.79 0.78 0.78 0.78 0.78 0.47 0.47 0.22 0.22 0.22 0.22 0.22	6LUC UTIL 0.00 0.00 0.34 0.35 0.35 0.35 0.35 0.35 0.35 0.35
	ADJ RESIS	57.6 56.1.5 56.4.2 56.2.3 57.2 57.2 57.2 57.2 57.2 57.3	ADJ ADJ 79.2 1168.1 116.9 116.9 116.9 65.8 66.1 64.1 64.1 64.1 64.1 64.1 64.1 64.1
MEDVOL=370	ADJ FLOW	0.66 57.6 0.66 56.4 0.60 60.5 0.62 56.4 0.65 54.2 0.67 53.7 0.69 60.7 0.67 64.2 0.69 60.7 0.69 60.7 0.67 73.1 0.67 73.1 0.67 73.1 0.67 73.1 0.67 73.1 0.67 73.1	AbJ AbJ 0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.8
GROUP=EtOH	VRE- SIST	41.1 40.0 43.1 40.2 43.1 40.2 40.2 40.2 40.2 40.2 41.3 42.3 42.3 43.3 43.3 43.3 43.3 43.3 43.3 43.3 44.9 52.1 52.1 52.1 52.1 52.1 52.1 52.1 53.4 64.9 66.5	VRE- SIST 63.0 63.0 93.0 92.0 92.0 92.0 52.0 52.0 57.0 47.0 47.0 47.0
	LACT		
DOSETIME=11:45	DEXT ROSV	15 0.851 0.8 87 0.830 1.0 46 0.785 1.0 56 0.775 1.0 58 0.775 1.0 58 0.775 1.0 68 0.775 1.0 100 0.993 1.0 68 1.010 1.0 100 1.060 1.0 100 1.060 1.0 100 1.060 1.0	DEXT ROSV 1.150 1.160 1.150 1.150 1.010 1.010 1.000 1.000 1.100
	LACT	WWW444444WWWWGGEEEEE	
FLAPWT=25.33	DEXT	1.170 0.1.170	DEXT ROSA 1.150 1.150 1.150 1.150 1.150 1.150 1.160 1.170 1.170 1.170
	LACT		
-R PHA	MEAN	0.93 0.93 0.93 0.94 0.97 0.97 0.97 0.97 0.97 0.95 0.95	FEAN FEEAN FEEN FEE
SIDE=95-22-4-R PHASE=2	MED	36.8 36.1 0.93 0.018 5 37.1 0.84 0.017 5 37.1 0.87 0.017 5 37.1 0.87 0.017 6 37.1 0.94 0.016 7 36.9 0.97 0.017 3 36.9 0.97 0.007 2 37.0 0.97 0.007 4 37.0 0.97 0.007 5 37.0 0.97 0.007 6 37.0 0.97 0.007 7 36.9 0.97 0.007 8 36.9 0.97 0.007 9 36.9 0.94 0.007 9 36.9 0.94 0.007 9 36.9 0.94 0.007 9 36.9 0.94 0.007 9 36.9 0.94 0.007 9 36.9 0.94 0.007 9 36.9 0.94 0.007 9 36.9 0.94 0.007	TEMP TEMP TEMP TEMP TEMP TEMP TEMP TEMP
	BP		— — — — — — — — — — — — — — — — — — —
ANIMAL/	ART Medph	44444444444444444444444444444444444444	
26/50/	HUMI	37.6 31.7 37.8 28.1 37.8 28.4 37.8 29.9 37.8 29.4 37.8 20.7 37.8 30.9 37.8 30.9 37.8 31.5 37.8 31.3 37.8 32.1 37.8 32.1 37.8 32.0 37.8 32.0	HUMI DITY 39.6 37.8 33.0 33.0 33.1 31.9 30.9 30.9 31.7 33.8 32.3 32.3
DATE=04/05/95	AIR	36.9 37.6 37.8 37.8 37.8 37.8 37.8 37.8 37.8 37.8	AIR TEMP 36.0 36.0 37.1 37.2 37.2 37.2 37.2 37.2 37.2
FLAPN0=2531	REL- TIME	44 -1.02 15 -0.75 30 -0.75 45 0.00 45 1.00 45 1.00 45 2.50 45 3.00 45 4.00 45 5.00 45 6.00 45 6.00 45 6.00 45 6.00 45 6.00 46 6.50 47 6.50 48 6.50 49 6.50 49 6.50 40 6.50 40 6.50 41 6.50 42 6.50 43 6.50 44 6.50 45 6.50 46 6.50 47 6.50 48 6.50 48 6.50 49 6.50 40 6.50 40 6.50 41 6.50 42 6.50 43 6.50 44 6.50 45 6.50 46 6.50 47 6.50 48 6.50 48 6.50 49 6.50 40 6.50	REL- TIME -0.98 -0.73 -0.63 -0.63 -0.52 -0.52 -0.77 -1
FLAP	ACTL TIME	11:15 11:15	ACTL TIME 10:15 10:30 11:16 11:45 11:45 12:30 13:30 14:30 15:30 16:30
	TARG	10:45 11:10 11:13 11:13 12:45 14:45 15:45 16:45 16:45 17:45 18:45 19:45 19:45	TARG 10:15 10:15 10:45 11:15 11:15 11:15 12:30 13:30 14:30 15:30 15:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

i							
	SUD SLUC	1.49 1.55 1.61 1.74 1.74		OU10	0.01 0.05 0.05 0.07 0.07 1.10 0.07 1.10 1.10 1.10 1.10	SULUC	0.01
NCSU=No	GLUC	0.15 0.13 0.15 0.15	NCSU=Yes	GLUC UTIL	0.00 0.15 0.37 0.48 0.59 0.71 0.77 0.67 0.67 0.67 0.67 0.67 0.67 0.67	GLUC	0.32
	ADJ RESIS	59.1 55.3 46.5 45.2		ADJ RESIS	84 66.9 87 49.5 89 47.1 89 46.0 89 46.0 89 45.1 87 43.5 88 42.0 90 40.2 84 40.4 84 40.4 84 40.9 80 40.2 81 39.3 81 39.3 81 39.3 81 35.5 82 42.7 84 40.9 84 40.9 86 40.9 87 35.5 88 36.8 88 36.	ADJ RESIS	56.6 56.6
MEDVOL=413	ADJ FLOW	0.80 0.80 0.80 0.80 0.80	MEDVOL=467	ADJ FLOW		ADJ FLOW	0.83
P=EtOH	VRE- SIST	47.0 44.0 44.0 37.0 36.0	GROUP=EtOH	VRE- SIST	60.2 77 42.4 62.5 64.6 67.7 64.6 67.7 62.7 63.2 60.3 60.	VRE- SIST	47.0
DOSETIME=11:14 GROUP=EtOH	LACT	0.93 1.38 1.00 0.84 1.10		LACT	3.1 1.79 1.17 1.10 1.10 1.10 1.10 1.10 1.10 1.00 1.0	LACT	1.37
TIME=11:	DEXT ROSV	1.110 1.120 1.120 1.110 1.120	DOSETIME=11:00	DEXT ROSV	268 1.070 3.353 0.973 1.359 0.974 1.359 0.914 1.359 0.856 1.448 0.769 1.448 0.768 1.448 0.768 1.448 0.768 1.448 0.768 1.448 0.768 1.448 0.768 1.448 0.806 1.451 0.804 1.370 0.846 1.370 0.846 1.370 0.846 1.327 0.854 1.327 0.910 1.259 0.927 1.346 0.944 1.346 0.944 1.346 0.944 1.346 0.944 1.348 0.	DEXT	1.020
	LACT	0.070 0.073 0.064 0.062 0.058		LACT		_ ~	0.212
PHASE=2 FLAPWT=27.18 (continued)	DEXT	1.180 1.170 1.180 1.180 1.170	FLAPWT=30.39	DEXT	93 0.019 1.130 697 0.019 1.150 699 0.019 1.150 699 0.019 1.160 699 0.018 1.160 699 0.018 1.160 699 0.016 1.160 699 0.011 1.160 699 0.011 1.160 699 0.011 1.160 699 0.011 1.170 699 0.011 1.170 699 0.0011 1.170 699 0.0011 1.170 699 0.008 1.170 699 0.008 1.170 699 0.008 1.170 699 0.006 0.006 0.006 1.170 699 0.006 0	DEXT	1.160
SE=2 FLAPWT (continued)	LACT	0.005 0.004 0.003 0.003 0.003	PHASE=2 FL	LACT	0.019 0.019 0.019 0.016 0.011 0.011 0.011 0.001 0.008 0.008 0.008 0.006 0.006	LACT	0.020
4-L PHA	MEAN	600000		MEAN			1.00
SIDE=95-22-4-L	MED	36.5 36.5 36.4 36.4 36.4	ANIMAL/SIDE=95-207-6-R	MED	35. 35.8 0.35.8 0.35.6 0.05.8	MED	35.9 36.6
AL/SIDE	BP MEAN	44 44 32 32 32 32 32	L/SIDE:	BP MEAN	56 43 42 42 44 44 44 45 45 46 47 47 47 47 47 47 47 47 47 47 47 47 47	X	25 25
S ANIMAL/	ART Medph	4.7.7 4.7.7 4.7.7 3.3	ANIWA	ART	A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ART MEDPH	7.3
DATE=04/05/95	HUMI	34.7 35.8 35.0 34.3	706/95	HUMI	36.7 31.9 31.9 31.9 31.9 31.9 31.9 31.9 31.9	HUMI	40.0
DATE=0	AIR TEMP	37.2 37.2 37.2 37.1 37.2	DATE=04/06/95	AIR	38.4 36.7 35.2 36.7 35.2 37.3 31.9 37.5 33.9 37.4 33.4 35.4 35.4 35.4 35.4 35.4 35.5 37.5 35.9 37.5 37.5 35.9 37.5 37.5 37.5 37.5 37.5 37.5 37.5 37.5	AIR	36.7 37.3
FLAPNO=2532	REL- TIME	5.77 6.27 6.77 7.27 7.77 8.27	FLAPNO=2533	REL- TIME	1.00 -1.00 0.15 -0.75 0.45 -0.25 1.00 0.00 1.30 0.00 1.30 1.00 2.00 1.50 2.30 2.50 4.00 3.00 4.30 3.50 4.30 4.00 5.30 4.00 6.30 6.00 7.30 6.50 8.30 7.00 8.30 7.00 8.30 7.00	4 111	-1.00
FLAP	ACTL TIME	17:00 17:30 18:00 18:30 19:30	FLAPN	ACTL TIME	10:00 10:15 10:30 11:00 11:00 12:30 13:30 14:30 14:30 14:30 17:00 16:30 17:00 17:30 18:00 19:00	ACTL TIME	9:45
	TARG	17:00 17:30 18:30 18:30 19:30	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TARG	10:00 10:15 10:30 11:30 12:30 13:30 14:30 15:30 16:30 16:30 17:30 17:30 17:30 17:30 17:30 17:30 17:30	TARG	9:45 10:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

			;		
	GLUC	0.02 0.05 0.05 0.05 0.05 0.05 0.05 0.05	Mno	CLUC	0.01 0.23 0.23 0.33 0.44 1.27 1.27 1.59 2.69 3.57 3.57
NCSU=Yes	GLUC	0.52 0.64 0.73 0.73 0.87 0.87 0.87 0.60 0.60 0.27 0.27 0.25	NCSU=Yes GLUC	UTIL	0.31 0.43 0.47 0.58 0.58 0.59 0.56 0.56 0.56 0.56
MEDVOL=431	ADJ RESIS	53.0 45.2 45.3 45.3 45.3 50.2 50.3 60.3	MEDVOL=457 ADJ ADJ	RESIS	33.8 33.9 33.6 33.6 33.7 35.2 35.2 35.2 35.6 35.6 35.6 35.6 35.6 35.6
	ADJ FLOW	0.83 0.083 0.083 0.083 0.083 0.083 0.083 0.083		FL0	0.83 0.83 0.83 0.83 0.84 0.92 0.92 0.92 0.92 0.93
GROUP=3 mg HD	VRE- SIST	44.0 488.0 488.0 337.0 44.0 44.0 44.0 38.0 38.0 38.0	GROUP=15 mg HD LACT VRE-	SIST	29.8 29.6 29.6 29.6 30.9 31.5 31.5 31.5 31.6 31.6 31.6 31.6 31.6 31.6 31.6 31.6
	LACT	1.26 1.09 1.09 1.09 1.09 1.08 1.08 1.08 1.09	GROUP= LACT	DEXT	0.09 0.09 0.09 0.09 0.09 0.09 0.09 0.09
DOSETIME=10:45	DEXT	0.921 0.869 0.841 0.809 0.809 0.757 0.757 0.755 0.945 0.934 0.977 1.010 1.060 1.060	DOSETIME=10:29 LACT DEXT	ROSV	0.947 0.924 0.859 0.859 0.816 0.816 0.831 0.847 0.864 0.865 0.863 0.863
	LACT	0.308 0.357 0.365 0.387 0.407 0.407 0.373 0.373 0.283 0.283 0.185 0.126 0.116	DOSETIM	ATEV	0.208 0.245 0.267 0.292 0.317 0.317 0.335 0.336 0.327 0.327 0.293
FLAPWT=26.35 ntinued)	DEXT	1.150 1.150 1.150 1.150 1.150 1.170 1.170 1.180 1.170	FLAPWT=32.79 ACT DEXT	ROSA	1.130 1.150 1.150 1.140 1.150 1.150 1.150 1.150
E=2 FLAPWT≡ (continued)	LACT	0.019 0.019 0.018 0.017 0.013 0.008 0.008 0.008 0.008 0.007 0.007 0.005 0.005		ATEA	0.018 0.018 0.017 0.017 0.015 0.013 0.010 0.009 0.009
L PHASE=2	MEAN	000000000000000000000000000000000000000	PHASE=2	FLOW	0.94 0.95 0.98 0.98 1.03 1.05 1.05 1.06 0.99
DE=95-207-6-L	MED	36.5 36.5 36.5 36.5 36.5 36.5 36.5 36.5	1DE=95-1-4-L BP MED	TEMP	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
_	BP	75 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	S	MEAN	2333333334
ANIMAL/S	ART MEDPH	WW440WWWWWWW444444	ANIMAL/ ART	MEDPH	77777777777777777777777777777777777777
96/90	HUMI	35.6 35.6 36.6 37.6 37.6 37.6 37.6 37.6 37.6 37	12/95 HUMI	DITY	39.0 37.8 38.3 37.6 37.2 37.2 37.2 37.3 36.3 36.3 36.3 36.3 36.3 36.3 36.3
DATE=04/06/95	AIR	337.53 377.53 377.53 377.53 377.53 377.53 377.53 377.53	DATE=04/12/95 AIR HUMI	TEMP	37.3 37.3 37.4 37.7 37.7 37.7 37.7 37.7
	REL- TIME	-0.50 -0.25	FLAPNO=2536 (TIME	0.00 0.03 0.03 0.03 0.03 0.03 0.03 0.03
- FLAPNO=2534	ACTL	10:15 10:30 10:30 11:45 11:45 12:45 14:45 16:15 16:15 17:45 18:45	- FLAPNO ACTL	TIME	9:30 9:45 10:02 10:02 10:29 11:30 11:30 13:30 14:30 15:00 16:00 16:00 16:00
	TARG	10:30 10:30 11:45 11:45 12:45 13:45 14:45 15:45 16:45	TARG	TIME	9:30 10:05 10:05 10:05 11:30 12:00 13:00 14:30 15:30 15:30 15:30 16:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

;			:																		:			
	GLUC	3.96 4.20 4.47 4.77	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CUM	0.01	0.12	0.41	0.59	1.26	.9	2.31	2.81	3.00	3.17	35.5	3.57	3.65	3.77	3.96			CUM	0.01 0.06 0.12 0.20	
NCSU=Yes	GLUC UTIL	0.48 0.47 0.55 0.59	NCSU=No	GLUC	0.24	0.43	99.0	79.0 0.67	0.69	 	9.0	0.45	0.40	0.34	0.50	0.25	0.17	0.24	0.24		NCSU=No	GLUC	0.12 0.20 0.23 0.32	
MEDVOL=457	ADJ RESIS	36.5 36.7 32.9 32.6	VOL=482	ADJ RESIS	36.6	38.8	37.7	36.6 36.6	36.6	39.8	40.9	45.1	49.5	49.5	0.00	48.5	46.3	20.6	44-1	į	MEDVOL=435	ADJ RESIS	41.8 43.1 48.0 51.7	
MEDVO	ADJ FLOW	0.88 0.87 0.94 0.95	æ	ADJ FLOW	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.45	0.93	0.93	0.93	0.93			ADJ FLOW	0.91 0.86 0.85 0.85	
GROUP=15 mg HD	VRE- SIST	32.2 32.3 29.0 28.7	GROUP=15 mg HD MEDVOL=482	VRE- SIST	34.0	36.0	35.0	34.0 34.0	34.0	37.0	38.0	0.04	46.0	46.0	0.74	45.0	43.0	47.0	44.0		GROUP=E tOH	VRE- SIST	35.0 36.1 40.2 43.3	
GROUP=	LACT	0.98 0.95 0.91 0.88		LACT	1.91	1.35	1.09	1.07	1.7	1.06	7.0	50.1	1.01	1.14	30.		1.59	0.98	1.69			LACT	1.63 1.16 1.06 0.95	
E=10:29	DEXT	0.897 0.888 0.869 0.851	DOSETIME=11:01	DEXT	0.990	0.887	0.763	0.746	0.723	0.721	0.771	0.830	0.915	0.961	1.985	1.010	1.070	1.030	1.020		DOSETIME=10:43	DEXT	1.070 1.040 1.030 0.974	
DOSETIME=10:29	LACT	0.271 0.265 0.272 0.281		LACT	0.291	0.364	0.445	0.448	0.477	0.480	0.416	0.313	0.257	0.246	0.200	0.171	0.177	0.155	0.150			LACT	0.121 0.139 0.150 0.181	
FLAPWT=32.79 continued)	DEXT	1.160 1.150 1.150 1.150	FLAPWT=35.45	DEXT	1.130	1.140	1.150	1.140	1.130	1.150	1.150	1.150	1.150	1.160	1.160	1.160	1.170	1.170	1.150		FLAPWT=31.29	DEXT	1.130 1.140 1.150 1.140	
3	LACT	0.013 0.015 0.016 0.017		LACT	0.023	0.023	0.025	0.025	0.024	0.024	0.022	0.022	0.020	0.020	50.0	0.019	0.018	0.018	0.008		PHASE=2 F	LACT	0.023 0.023 0.023 0.023	
PHASE=2	MEAN	1.00	R PHASE	MEAN	1.00	0.0	1.00	8.8	86	8.8	1.00	9.6	9.0	1.00	8 6	.0.	1.00	1.00	8.8			MEAN	1.03	
DE=95-1-4-L	MED	36.4 36.4 36.3 36.4	DE=95-205-7-R PHASE=2	MED	36.3	35.7	35.9	35.9	35.9	36.0	36.0	35.0	35.9	35.9	5, 5, 5, 0	36.1	36.2	36.2	36.1 36.2		/SIDE=95-205-7-L	MED	35.5 36.1 35.9 35.9	
	BP	32 32 31 31 31		BP	34	3 %	32	% %	35 12	32	38	64 7	94	9 !	74	5.5	43	25	. 4 4			8P MEAN	33 44 44	
ANIMAL/SI	ART MEDPH	7.4	ANIMAL/S	ART	7.3	7.3	7.3	7.3	7.3	.3	7.3	2. K	7.4	7.4	4.7	7.4	7.4	7.4	7.4		ANIMAL	ART MEDPH	7.4 7.4 7.3 7.3	
	HUMI	35.4 35.7 35.9 36.4	13/95	HUMI	40.0	7.07	40.3	39.8 39.4	39.1	40.0	38.4	38.7	38.9	38.0	28.7	38.5	38.5	38.3	38.8 38.0		DATE=04/13/95	HUMI	39.7 38.5 38.4 38.2	
DATE=04/12/95	AIR	37.7 37.6 37.5 37.5	DATE=04/13/95	AIR	36.6	36.4	36.6	36.5	36.7	36.8	36.9	36.8	36.8	36.8	20.0	37.0	37.0	37.0	37.0 37.0			AIR TEMP	35.9 36.6 36.6 36.7	
	REL- TIME	6.52 7.02 7.52 8.02		REL- TIME	-1.02	-0.70	-0.27	0.00	0.98	1.98	2.48	87.78	3.98	4.48	2. 1. 20. 4.	5.98	6.48	6.98	7.98		FLAPN0=2538	REL- TIME	-0.97 -0.72 -0.47 -0.22	
. FLAPNO=2536	ACTL TIME	17:00 17:30 18:00 18:30	. FLAPNO=2537	ACTL TIME	10:00	10:15	10:45	11:01	12:00	13:00	13:30	14:00	15:00	15:30	16:00	17:00	17:30	18:00	18:30 19:00		FLAF	ACTL TIME	9:45 10:00 10:15 10:30	
	TARG	17:00 17:30 18:00		TARG	10:00	10:15	10:45	11:00	12:00	13:00	13:30	14:00	15:00	15:30	16:00	17:00	17:30	18:00	18:30 19:00			TARG	9:45 10:00 10:15 10:30	
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TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	0.26 0.41 0.52 0.70 0.70 0.86 1.03 1.37 1.52 1.65 1.65 1.99 2.08	CLM GLUC 0.01 0.20 0.41 1.43 1.43 1.95 4.99 4.99 6.23 6.23
NCSU=No	GLUC	0.30 0.28 0.28 0.37 0.35 0.35 0.35 0.29 0.20 0.20 0.20 0.22	GLUC UTIL UTIL 0.64 0.78 1.02 1.03 1.03 1.03 1.05 0.79 0.79 0.54 0.54
MEDVOL=435	ADJ RESIS		* ************************************
	ADJ	0.88 46.6 0.89 46.6 0.89 50.7 0.88 44.1 0.87 43.8 0.86 45.4 0.86 44.0 0.80 37.5 0.78 37.5 0.79 36.6 0.80 36.2 0.80 36.2 0.80 36.2	ADJ FLOW 0.82 0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73
GROUP=EtOH	VRE- SIST	4 41.0 4 42.5 5 37.0 38.0	WE- SIST 32.7 33.7 33.0 34.6 34.6 34.6 40.0 41.4 41.4 41.4 39.8 39.8
	LACT		
DOSETIME=10:43	DEXT	27 1.020 1.2 57 1.020 1.2 57 0.968 1.2 57 0.988 1.2 58 0.983 1.2 50 0.997 1.0 50 1.020 1.2 54 1.050 1.2 54 1.050 1.2 54 1.050 1.2 54 1.050 1.2 54 1.050 1.2 54 1.050 1.2	DEXT ROSV 0.854 0.812 0.780 0.697 0.695 0.662 0.662 0.676 0.676 0.676 0.0712 0.718 0.918
	LACT	2000000-0	A P TOWN A D A D A D A D A D A D A D A D A D A
FLAPWT=31.29 nued)	DEXT	1.140 1.150 1.150 1.150 1.150 1.170 1.170 1.170 1.170 1.170	DEXT LAPM £2.63 LAPM LAPM £2.63 LAPM LAPM
PHASE=2 FLAPW (continued)	LACT	W4WV-0WWWWVVV994	NN ATEA NN ATEA 14 0.020 15 0.019 16 0.019 17 0.019 18 0.015 18 0.015 18 0.016 18 0.016 18 0.016 18 0.016 18 0.016 18 0.016 18 0.016
	MEAN	00000000000000000	
IMAL/SIDE=95-205-7-L	MED	35.9 35.8 35.8 35.8 36.1 36.1 36.2 36.2 36.2 36.2 36.2 36.2 36.2 36.2	MAL/SIDE=95-208-5-L BP MED MED FIL 34 35.6 1. 34 36.2 1. 33 36.3 1. 32 36.3 0. 31 36.3 0. 32 36.3 0. 31 36.3 0. 32 36.2 1. 34 36.2 1. 40 36.2 1. 41 36.2 0. 41 36.2 1. 40 36.3 1. 40 36.3 1. 39 36.4 0.
AL/SIDE	BP MEAN	22,22,22,23,33,33,34,45,44,45,45,45,45,45,45,45,45,45,45,45	i./SIDE: MEAN 33 33 33 33 33 33 33 33 33 33 33 33 33
¥	ART MEDPH		ANIMA PRI MEDPH 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3
DATE=04/13/95	HUMI	23.28 23.28	HUMI DITT 35.2 36.2 36.2 36.2 36.2 36.2 36.2 36.2 36
DATE=0	AIR	25. 25. 25. 25. 25. 25. 25. 25. 25. 25.	AIR HUMI TEMP DITY 36.6 39.0 36.8 37.1 37.0 36.4 37.2 35.9 37.2 35.9 37.1 36.5 37.1 36.5 37.1 36.5 37.1 36.5 37.1 36.5 37.1 36.5 37.1 36.5 37.1 36.5 37.1 36.5 37.1 36.5 37.2 36.5 37.2 36.5 37.2 36.5
FLAPNO=2538	REL- TIME	0.00 0.03 1.53 1.53 1.53 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.0	CTL REL- IME TIME :30 -1.00 :45 -0.75 :00 -0.50 :30 1.00 :30 1.50 :30 2.00 :30 3.50 :30 4.50 :30 6.50 :30 6.50
FLAP	ACTL TIME	0008446694668	- FLAPR ACT L 11ME 9:45 9:45 9:45 11:30 11:30 12:30 12:30 12:30 12:30 12:30 12:30 12:30 13:30 14:30 17:30
	TARG	10:45 11:15 11:15 12:15 13:15 14:15 14:15 16:15 18:15 18:15	TARG TIME 9:30 9:45 10:00 10:30 11:30 11:30 12:30 12:00 13:00 13:00 14:00 15:00 16:00 16:00 17:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

•			•																:					
	OLUG	6.94	8 9 9 9 9 8	GLUC	0.01	0.21	0.38	0.55	0.77	0.89 0.98	1.09	1.17	1.30	1.39	1.46	1.60	1.60	1.61		CUM	GLUC	0.01	0.53	•
NCSU=Yes	GLUC	0.48	NCSU=Yes	GLUC	0.28	0.41	0.32	0.33	0.24	0.25	0.22	0.15	0.13	0.17	21.0	0.13	0.00	0.02	NCSU=Yes	פרחכ	UTIL	0.36	0.57	;
	ADJ RESIS	49.3	MEDVOL=408	ADJ RESIS	54.7	42.6	40.7	39.0	38.4	36.2 34.7	33.7	34.2	36.9	36.0	36.7	37.8	36.7	36.0 37.3	MEDVOL=505	ADJ	RESIS	60.6 53.4 57.5	52.4	:
MEDVOL=410	ADJ FLOW	0.77	HD MED	ADJ FLOW	0.79	0.77	0.76	0.75	0.3	0.78	0.80	0.7	0.73	0.78	0.79	0.79	0.76	0.78	HD MED	ADJ	FLOW	0.97	0.97	;
UP=EtOH	VRE- SIST	39.0 38.1	GROUP=15 mg H	VRE- SIST	43.0	33.5	32.0	31.6	30.2	28.4	26.5	26.9	29.0	28.3	28.9	29.7	28.9	28.3 29.3	GROUP=15 mg H	VRE-	SIST	59.0	51.0)
30 GRO	LACT	1.02		LACT	0.80	0.95	1.05	1.08	1.03	1.12	0.78	0.97	1.05	29.0	0.84	1.12	!	2.70 1.13		LACT	DEXT	0.77	0.92	}
FLAPWT=25.83 DOSETIME=10:30 GROUP=EtOH tinued)	DEXT	0.920	DOSETIME=10:42	DEXT ROSV	0.984	0.920	0.949	0.954	0.998	1.010	1.020	1.030	1.040	1.030	1.030	1.040	1.150	1.050	DOSETIME=10:29	DEXT	ROSV	0.973	0.889	;
83 DOSE	LACT	0.235		LACT	0.126	0.209	0.189	0.201	0.150	0.144	0.120	0.11	0.107	0.103	0.107	0.10	0.107	0.087		LACT	ATEV	0.139	0.267	,
APVT=25. ued)	DEXT	1.130	PHASE=2 FLAPWT=27.25	DEXT	1.110	1.110	1.100	1.110	1.110	1.110	1.120	1.100	1.100	1.110	1.100	1,100	1.010	1.060	FLAPWT=24.47	DEXT	ROSA	1.120	1.120	
PHASE=2 FLAPWT (continued)	LACT	0.021	=2 FLAP	LACT	0.025	0.029	0.030	0.033	0.035	0.036	0.042	0.043	0.046	0.049	0.048	0.040	0.056	0.060		LACT	ATEA	0.026	0.027)
	MEAN	0.98		MEAN	1.00	0.0	0.97	0.95	0.96	0.99	1.02	5.5	. 6	0.99	1.01	0.98	0.97	0.99	L PHASE=2	MEAN	FLOW	888	8888	-
ANIMAL/SIDE=95-208-5-L	MED	36.4 36.6	E=95-212-7-R	MED	36.7	35.7	36.6	36.8	36.7	36.7	36.6	36.5	36.5	36.6	36.4	36.4	36.4	36.6 36.6)E=95-212-7-L	MED	TEMP	35.1 35.8	35.6	
L/SIDE=	8P MEAN	38	SIDE=95	BP	36	23	3 5	2 %	8	5 5 7 8 7 8 7	27	27	8 8	82	8 8	\$ 6	8	8 88	SIDE=9	В	MEAN	52 22 23	2 6 4 8	}
	ART MEDPH	7.3	ANIMAL/SID	ART MEDPH	7.3	7.3	7.4	7.3	7.3	7.3	7.4	7.3	7.7	7.3	7.3	7.4	7.3	7.4	ANIMAL/SID	ART	MEDPH	7.3	4.7.4	:
119/95	HUMI	35.5		HUMI DITY	37.5	37.9	36.7	36.5	36.6	36.2	39.2	38.0	39.2	39.5	40.9	6.07	41.3	40.8	20/02	HUMI	DITY	41.7	40.2	;
DATE=04/19/95	AIR TEMP	37.3 37.3	DATE=04/20/95	AIR TEMP	37.2	36.8	37.6	37.7	37.7	37.7	37.6	37.5	37.5	37.6	37.5	37.5	37.5	37.5 37.6	DATE=04/20/95	AIR	TEMP	36.0	36.8	;
FLAPNO=2540	REL- TIME	8.00		REL- TIME	-0.95	-0.45	0.00	0.55	1.55	2.55	3.05	3.55	4.55	5.05	5.55	6.55	7.05	7.55 8.05		REL-	TIME	-0.98	50.00	;
- FLAPN	ACTL TIME	18:00 18:30	FLAPN0=2541	ACTL TIME	9:45	10:15	10:42	11:15	12:15	12:45	13:45	14:15	15:15	15:45	16:15	17:15	17:45	18:15 18:45	FLAPNO=2542	ACTL	TIME	9:30	10:15	-
1	TARG	18:00 18:30		TARG	9:45	10:15	10:45	11:15	12:15	12:45	13:45	14:15	15:15	15:45	16:15	17:15	17:45	18:15 18:45	1	TARG	TIME	9:30	10:30	-
1																								

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

1	CUM	1.12	1.88	2.31	2.51	2.70	3.06	3.42	3.59	3.76	3.93
NCSU=Yes	פרטכ טדונ	0.56	0.55	0.43	0.40	0.39	0.35	0.36	0.36	0.34	0.33
MEDVOL=505	ADJ RESIS	46.2	48.3 51.4	54.5	51.4	51.4 48.3	44.2	44.2	40.1	38.0	37.0
	ADJ FLOW	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
GROUP=15 mg HD	VRE- SIST	45.0	50.0	53.0 50.0	50.0	50.0 47.0	43.0	43.0	39.0	37.0	36.0
GROUP	LACT	1.08	1.22	1.17	1.04	0.97	9.0	0.93	0.00	96.0	0.99
DOSETIME=10:29	DEXT	0.890	0.914	0.955	296.0	0.971	0.987	0.983	0.985	0.973	0.926
_	LACT	0.279	0.256	0.237	0.200	0.183	0.168	0.162	0.158	0.152	0.166
: FLAPWT=24.47 continued)	DEXT	1.120	1.140	1.130	1.130	1.130	1.130	1.130	1.130	1.110	1.060
:2 FLAP (contir	LACT	0.030	0.032	0.032	0.030	0.028	0.025	0.028	0.028	0.023	0.033
PHASE=2	MEAN	0.0	88.	9.6	1.00	8.8	1.00	9.6	1.00	1.00	1.00
AL/SIDE=95-212-7-L	MED	35.8	36.0 36.1	36.0 36.0	36.0	35.9 35.9	36.0	36.1 36.0	35.9	36.0	36.0
S1DE=99	BP	45	20	20 23	2	44	43	43	36	37	36
ANIMAL/	ART	7.4	7.7	7.7	7.4	7.4	7.4	4.7	7.4	7.4	7.4
	HUMI	39.6	40.3	6.07	41.4	41.6	45.4	43.5	43.7	43.9	4.44
DATE=04/20/95	AIR	36.8	37.0 36.9	37.0	36.9	36.9 36.9	36.9	37.0 36.9	37.0	37.0	37.0
	REL- TIME	1.02	2.02	3.02	4.02	5.02	5.52	6.02 6.52	7.02	7.52	8.02
FLAPNO=2542	ACTL	11:30	12:30 13:00	13:30	14:30	15:30	16:00	16:30	17:30	18:00	18:30
	TARG	11:30	12:30	13:30	14:30	15:00	16:00	16:30	17:30	18:00	18:30

	S	GLUC	0.01	0.22	0.44	9.0	0.84	1.39	1.86	2.32	2.75	3.25	3.69	4.16	4.60	5.03	5.42	5.74	60.9	6.40	99.9	6.94	7.20
NCSU=Yes	GLUC	UTIL	0.25	0.83	0.87	0.95	0.00	0.98	0.93	0.93	0.85	96.0	0.93	0.93	0.89	0.86	0.77	0.65	0.71	0.61	0.52	0.56	0.53
MEDVOL=457	ADJ	RESIS	85.2	35.2	34.1	30.7	30.7	34.1	32.9	34.1	34.1	35.2	36.3	36.3	36.3	37.5	45.0	39.7	39.7	39.7	6.04	6.04	6.04
웊	ADJ	FLOW	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
=15 mg	VRE-	SIST	75.0	31.0	30.0	27.0	27.0	30.0	29.0	30.0	30.0	31.0	32.0	32.0	32.0	33.0	37.0	35.0	35.0	35.0	36.0	36.0	36.0
1 GROUP=15	LACT	DEXT	0.55	0.84	0.93	0.93	0.98	96.0	1.01	1.02	9.	1.02	1.03	9.	0.99	0.93	96.0	1.1	0.94	1.05	1.13	9.	1.01
DOSETIME=10:41	DEXT	ROSV	1.060	0.830	0.825	0.792	0.794	0.772	0.780	0.772	0.812	0.771	0.759	0.770	0.798	0.809	0.844	0.893	0.870	0.877	0.883	0.899	0.901
DOSETI	LACT	ATEV	9.076	.299	343	.374	372	393	397	398	3.362	605.0	905.0	3.395	0.369	0.341	0.318	0.311	0.286	0.277	0.254	0.243	0.231
FLAPWT=23.81	DEXT	ROSA	_	_	.170		_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	-ACT	\TEA	-	_	1.021	_	-	_	_	_	_	_	_	_	_	_	_	_		_	_	_	
PHASE=2	EAN	/ MO1:	_	_	00.	_	_	_	_	_	_	_	Ö	_	_	_	_	Ŭ	_	_	_	_	_
4-11-R	_	EMP	_	_	15.5	_	_	-	_	_	_	_	•		•				•	•		•	_
/SIDE=95-214-11-R		_	36	35	35	7 35	7 35	35	1-1	30 35	14.0	1-7	15.		1-1	•	•••	•-•	•••	•			
T/SIDE		H MEAN	K.	m	m	7	N	m															
ANIMA	ART	MEDP	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
9/92	E I	DITY	43.7	43.8	42.4	42.0	43.9	41.2	39.7	39.1	40.0	39.3	37.2	41.9	41.3	41.7	40.1	40.4	45.8	40.2	40.3	40.3	40.2
DATE=04/26/95	AIR	TEMP	36.7	36.0	36.2	36.2	36.2	36.2	36.3	36.4	36.5	36.6	36.7	36.5	36.4	36.4	36.4	36.4	36.3	36.5	36.7	36.8	36.8
	REL-	TIME	-0.93	-0.68	-0.43	-0.22	0.00	0.57	1.07	1.57	2.07	2.57	3.07	3.57	4.07	4.57	2.07	5.57	6.07	6.57	7.07	7.57	8.07
FLAPNO=2543	ACTL	TIME	6:45	10:00	10:15	10:28	10:41	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	18:45
1	TARG	TIME	9:45	10:00	10:15	10:30	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	18:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	SLUC	0.01	0.16	0.32	0.54	0.70	1.24	1.71	2.11	2.56	2.97	3.41	3.75	3.96	4.17	4.38	4.58	4.78	5.01	5.20	5.39	2.60
NCSU=Yes	GLUC	97.0	0.58	0.64	0.89	0.88	96.0	0.92	0.82	0.88	0.83	0.88	0.62	0.49	0.41	0.42	0.41	0.40	97.0	0.39	0.37	0.45
MEDVOL=450	ADJ RESIS	44.1	51.3	66.1	62.8	69.2	7.79	71.0	84.9	109.1	109.7	100.6	129.6	128.3	123.3	116.6	109.8	102.5	100.5	86.5	86.2	84.3
40 MED	ADJ FLOW	0.91	0.94	0.86	0.88	0.78	0.80	0.79	0.79	0.81	0.80	0.91	0.84	0.81	0.82	0.82	0.82	0.86	0.85	0.0	0.86	0.85
GROUP=15 mg	VRE- SIST	38.3	44.4	57.3	54.5	0.09	58.7	61.5	73.6	9.46	95.1	87.2	112.4	111.2	106.9	101.1	95.2	88.9	87.2	75.0	7.47	73.1
	LACT	0.88	0.82	0.93	0.99	0.1	1.00	1.00	1.02	0.97	26.0	9.	1.10	0.97	1.1	1.04	1.03	1.06	0.87	1.08	1.12	0.98
DOSETIME=10:26	DEXT	0.945	0.952	0.936	0.834	0.798	0.776	0.796	0.826	0.809	0.839	0.870	0.926	0.967	1.000	0.994	1.000	1.010	0.997	1.010	1.000	0.971
	LACT	0.163	0.177	0.230	0.323	0.364	0.388	0.379	0.345	0.347	0.329	0.319	0.273	0.205	0.195	0.191	0.181	0.176	0.169	0.167	0.169	0.165
FLAPWT=20.92	DEXT	1.100	1.140	1.160	1.140	1.140	1.140	1.150	1.140	1.140	1.150	1.160	1,150	1.150	1.150	1.150	1.150	1.150	1.160	1.140	1.130	1.120
	LACT ATEA	0.026	0.022	0.022	0.021	0.022	0.023	0.025	0.025	0.026	0.026	0.028	0.027	0.028	0.028	0.029	0.027	0.027	0.027	0.026	0.024	0.019
L PHASE=2	MEAN	1.05	1.08	1.00	1.01	0.00	0.92	0.91	0.91	0.93	0.93	1.06	0.97	0.94	0.95	76.0	0.95	0.99	0.98	1.04	0.99	0.99
-214-11-1	MED	35.8	36.1	36.3	36.3	36.3	36.2	36.3	36.3	36.4	36.5	36.6	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.6	36.7	36.7
S10E=95	BP	07	48	22	22	24	24	26	29	88	88	35	109	104	101	95	8	88	82	28	7,4	22
ANIMAL/	ART MEDPH	7.4	7.3	7.3	7.3	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4
	HUMI	36.8	36.2	36.9	35.4	35.1	35.7	35.0	33.6	32.5	33.6	32.7	35.7	35.2	35.8	35.6	34.6	35.1	33.9	34.8	32.4	33.7
DATE=04/26/95	AIR TEMP	36.4	37.1	37.2	37.3	37.3	37.3	37.5	37.5	37.6	37.6	37.7	37.6	37.9	37.5	37.5	37.5	37.4	37.5	37.6	37.7	37.7
	REL- TIME	-0.93	-0.68	-0.43	-0.18	0.00	0.57	1.07	1.57	2.07	2.57	3.07	3.57	4.07	4.57	5.07	5.57	6.07	6.57	7.07	7.57	8.07
FLAPN0=2544	ACTL TIME	9:30	9:45	10:00	10:15	10:26	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	9:30	6:45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

	CUM	0.01	0.33	0.53	0.75	1.25	1.78	2.28	2.79	3.23	3.64	4.02	4.38	4.67	2.00	5.29
NCSU=Yes -	GLUC UTIL	0.39	0.71	0.79	0.89	0.99	1.06	1.02	1.00	0.89	0.82	0.76	0.70	0.59	0.65	0.58
-=457	ADJ RESIS	42.1	39.9	41.3	32.0	38.9	39.8	43.9	44.8	52.3	55.9	56.5	58.2	60.1	59.5	58.7
MEDVOL=457	ADJ FLOW	0.95	0.98	0.92	0.94	0.92	0.93	0.89	0.92	0.0	0.88	0.00	0.91	0.0	0.91	0.00
GROUP=EtOH	VRE- SIST	37.0	35.1	36.4	28.2	34.3	35.1	38.6	39.4	46.1	49.5	49.8	51.2	52.9	52.4	51.7
	LACT	1.69	1.17	1.10	1.06	0.97	6.0	1.01	1.1	1.09	0.97	0.99	1.03	1.17	0.97	1.03
DOSETIME=10:45	DEXT ROSV	0.966	0.854	908.0	0.769	0.723	869.0	0.677	0.705	0.744	0.753	0.790	0.827	0.861	0.868	0.875
	LACT	0.292	0.351	0.385	0.415	0.429	0.463	0.474	0.498	0.452	0.385	0.361	0.347	0.336	0.304	0.291
FLAPWT=25.84	DEXT	1.120	1.130	1.130	1.130	1.130	1.130	1.110	1.120	1.120	1.110	1.110	1.120	1.110	1.140	1.120
PHASE=2 FL	LACT	0.031	0.028	0.030	0.031	0.033	0.037	0.038	0.039	0.041	0.038	0.044	0.044	0.044	0.041	0.039
	MEAN	1.08	1.1	1.05	1.07	1.05	1.06	1.01	1.04	1.02	1.00	1.03	1.04	1.02	1.03	1.03
SIDE=95-209-4-R	MED	35.0	36.4	36.6	36.6	36.6	36.7	36.7	36.5	36.9	36.8	36.7	36.7	36.7	36.7	36.7
	BP MEAN	9 6	36	38	30	36	37	36	۲1	25	67	51	53	24	24	53
ANIMAL/	ART Medph	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
DATE=04/27/95	HUMI	38.9	36.2	35.6	36.0	35.9	36.5	35.9	36.9	35.4	38.2	37.5	37.6	36.3	36.0	36.0
DATE=0	AIR TEMP	36.2	37.7	37.8	37.8	37.9	38.0	38.0	37.7	38.1	38.2	38.1	38.0	37.9	38.0	37.9
FLAPNO=2545	REL- TIME	1.00 K	-0.50	-0.25	0.0	0.50	1.00	1.50	2.00	2.50	3.00	3.50	7.00	4.50	2.00	5.50
- FLAPA	ACTL TIME	9:45	10:15	10:30	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15
	TARG	9:45	10:15	10:30	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

										:		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	UND OLD	5.56 5.82 6.06 6.28 6.52		CUM	0.01 0.18 0.36 0.59	2.13 2.72 2.72	4.07	5.36 5.36 5.63 5.63	5.88 6.18 6.78 7.09	Ş	CUM	0.01 0.24 0.44
NCSU=Yes	GLUC	0.54 0.52 0.48 0.44	NCSU=Yes	GLUC	0.48 0.69 0.72 0.90	1.32	0.93	0.63	0.60 0.56 0.56 0.64	NCSU=Yes	GLUC	0.80
	ADJ RESIS	61.2 46.1 56.2 55.9 52.4		ADJ RESIS	77.0 64.2 63.8 62.5	50.9 59.4 61.3	85.6 65.3 88.7	83.2 87.6 77.8	82.0 80.1 81.9 72.0	MEDVOL=444	ADJ RESIS	46.8 35.6 34.0
MEDVOL=457	ADJ FLOW	0.85 0.89 0.87 0.88	MEDVOL=337	ADJ FLOW	0.78 0.62 0.64 0.64	0.72	0.58	0.63	0.64		ADJ	0.98 0.98 0.97
GROUP=E tOH	VRE- SIST	53.9 40.6 49.5 46.2	GROUP=E tOH	VRE- SIST	50.0 41.7 48.2 41.4	33.1 38.6 39.8	55.6	26.9 26.9 30.5	52.0 53.2 48.7	GROUP=No Topical	VRE- SIST	40.0 30.4 29.1
	LACT	1.01 1.05 1.08 1.18		LACT	1.72 1.33 1.19 1.08	70.02	1.27	9299	1.18 1.02 1.06 0.95	GROUP	LACT	0.24 0.55 0.76
DOSETIME=10:45	DEXT	0.878 0.888 0.891 0.900	TIME=10:	DEXT	0.960 0.895 0.820 0.761	0.698 0.662 0.701	0.742 0.742 0.803 0.819	0.824 0.852 0.865 0.882	0.849 0.865 0.854 0.854	DOSETIME=10:45	DEXT	0.876 0.838 0.882
	LACT	0.283 0.272 0.265 0.265 0.265	FLAPWT=25.6 DOSETIME=10:15	LACT	0.341 0.351 0.405 0.447 0.481	0.481	0.477	0.340 0.301 0.288	0.323 0.310 0.295 0.291	DOSETIM	LACT	0.089 0.204 0.245
PHASE=2 FLAPWT=25.84 (continued)	DEXT	1.120 1.110 1.090 1.080	LAPWT=25	DEXT	1.140 1.140 1.140 1.150	1.130	1.120		50000	FLAPWT=25.4	DEXT	1.170
SE=2 FLAPWT (continued)	LACT	0.039 0.040 0.040 0.040 0.039	PHASE=2 F	LACT	0.032 0.024 0.025 0.026	0.030	0.041	0.045	0.046 0.045 0.047 0.047		LACT	0.019 0.021 0.020
	MEAN	0.97 1.01 1.00 1.00		MEAN	1.14 1.20 0.96 0.99 0.99	1.30	1.25	0.97 0.99 0.97	0.92 0.98 1.02 1.07	R PHASE=1	MEAN	1.15
ANIMAL/SIDE=95-209-4-R	MED	36.7 36.7 36.9 36.6	SIDE=95-209-4-L	MED	33.1 34.6 35.1 35.3 35.5	35.7	36.0	36.0 36.0 36.0	36.5 36.4 36.4 36.4	E=95-223-9-R	MED	36.3 36.1 36.3
L/SIDE:	BP MEAN	52 49 48 48	AL/SID	BP MEAN	24 50 70 70 70 70 70 70 70 70 70 70 70 70 70	£ £ 4 £ 5 £ 5 £ 5 £ 5 £ 5 £ 5 £ 5 £ 5 £	500 20	2 2 2 2 5	22 24 22 24 24 24 24 24 24 24 24 24 24 2	'SIDE=9	BP MEAN	46 33
ANIMA	ART MEDPH	7.4 7.4 7.4 7.4 7.4 7.3	ANIMAL/	ART Medph	2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	7.7	4.4.4.	4 4 4 4 .	44444	ANIMAL/SID	ART MEDPH	7.4 7.4 7.3
127/95	HUMI	36.2 35.2 35.2 35.3	DATE=04/27/95	HUMI	44.2 42.4 42.2 42.4	40.6	45.0 43.2	42.8 43.1 41.0	41.1 41.0 40.3 39.5		HUMI	38.5 37.2 36.7
DATE=04/27/95	AIR	38.0 38.0 38.2 37.9		AIR	33.7 35.2 35.7 35.9 36.0	36.2	36.5 36.5 36.5	36.5 36.4 36.4	36.6 36.6 36.7 36.6 36.7	DATE=05/03/95	AIR	37.5 37.5 37.5
FLAPNO=2545	REL- TIME	6.00 6.50 7.00 7.50 8.00	FLAPN0=2546	REL- TIME	-1.00 -0.75 -0.50 -0.25 0.00	1.50	3.50	4.00 4.50 5.50	6.50 7.50 8.00		REL- TIME	-1.00 -0.75 -0.50
- FLAPN	ACTL TIME	16:45 17:15 17:45 18:15 18:45	FLAP	ACTL TIME	9:15 9:30 9:45 10:00	10:45 11:15 11:45	12:15 12:45 13:15 13:45	14:15 14:45 15:15 15:45	16:15 16:45 17:15 17:45 18:15	FLAPN0=2547	ACTL TIME	9:45 10:00 10:15
	TARG	16:45 17:15 17:45 18:15 18:45		TARG	9:15 9:30 9:45 10:00 10:15	10:45 11:15 11:45	12:15 12:45 13:15 13:45	14:15 14:45 15:15 15:45	16:15 16:45 17:15 17:45 18:15) 1 1 2 3 1 1	TARG	9:45 10:00 10:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

	CUM	0.67	1.31	1.75	2.20	5.64	2.86	3.09	3.28	3.39	3.49	3.58	3.63	3.71	3.75	3.80	3.80	3.80
NCSU=Yes	GLUC	0.87	98.0	0.87	0.92	0.87	0.44	27.0	0.38	0.21	0.21	0.17	0.10	0.16	0.10	0.10	0.00	0.00
MEDVOL=444	ADJ RESIS	33.4	32.1	32.0	29.5	28.3	27.72	26.2	27.1	29.1	26.0	28.0	28.8	26.7	29.5	30.3	33.1	33.6
	ADJ FLOW	0.93	0.87	0.91	0.95	0.95	0.0	0.95	0.92	98.0	96.0	0.89	0.87	0.94	0.88	0.89	0.85	0.89
GROUP=No Topical	VRE- SIST	28.6	27.5	27.4	25.2	24.2	23.7	22.4	23.1	54.9	22.2	23.9	54.6	22.8	25.2	26.0	28.3	28.7
GROUP	LACT	0.83	0.95	1.02	0.98	1.01	1.08	1.07	1.11	1.68	1.35	1.17	1.7	0.95	1.25	0.0		
DOSETIME=10:45	DEXT	0.829	0.811	0.812	0.811	0.830	0.985	0.983	1.010	1.060	1.070	1.080	1.120	1.090	1.100	1.110	1.150	1.140
DOSETIN	LACT	0.306	0.361	0.374	0.364	0.355	0.210	0.210	0.186	0.169	0.124	0.099	0.087	0.075	0.067	0.054	0.025	0.021
WT=25.4 nued)	DEXT	1.170	1.170	1.160	1.160	1.160	1.160	1.160	1.160	1.150	1.150	1.150	1.160	1.150	1.140	1.150	1.150	1.140
PHASE=1 FLAPWT=25.4 (continued)	LACT	0.022	0.021	0.019	0.022	0.021	0.021	0.021	0.020	0.018	0.016	0.017	0.018	0.018	0.017	0.018	0.019	0.019
_	MEAN	1.09	1.02	1.06	1.1	1.12	1.06	1.12	1.08	1.01	1.13	1.05	1.02	1.10	1.03	1.04	0.99	1.05
1AL/SIDE=95-223-9-R	MED	36.6	36.6	36.6	36.6	36.8	36.8	36.8	36.8	36.8	36.9	36.8	36.8	36.7	36.7	36.7	36.6	36.7
31DE=9	BP	23	58	53	28	27	52	52	52	52	52	52	52	52	56	27	28	30
ANIMAL/	ART Medph	7.4																
3/95	HUMI	35.9	36.0	35.0	35.5	33.6	33.8	34.8	34.4	32.2	32.0	32.0	32.2	31.7	33.1	32.1	33.6	33.7
DATE=05/03/95	AIR	37.6		• •														
	REL- TIME	-0.23	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00
FLAPNO=2547	ACTL TIME	10:31	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	18:45
	TARG	10:30	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	18:45

	x 0	-4r80480r89047580;	4
	OULO	0.01 0.24 0.07 0.07 0.07 0.07 0.07 0.07 0.07 0.0	5.9
NCSU=Yes	GLUC UTIL	0.93 0.93 0.91 1.04 0.75 0.75 0.78 0.98 0.98 0.98 0.98	0.43
MEDVOL=399	ADJ RESIS	41.1 35.2 36.0 37.1 37.1 37.1 37.1 37.1 37.1 37.1 37.1	60.1
MEDVO	ADJ FLOW	0.85 0.85 0.05 0.05 0.05 0.05 0.05 0.05	0.76
GROUP=EtOH	VRE- SIST	31.6 27.0 28.2 28.2 38.2 38.2 47.2 47.2 47.2 47.2 47.3 47.3 47.3 47.3 47.3 47.3 47.3 47.3	7.94
	LACT	0.45 0.65 0.87 0.87 1.03 1.04 1.04 1.05 0.99 0.99	1.03
DOSETIME=10:30	DEXT	0.700 0.771 0.771 0.771 0.756 0.758 0.775 0.775 0.762 0.762 0.800 0.832	0.961
	LACT	0.192 0.259 0.315 0.360 0.389 0.407 0.410 0.424 0.424 0.424 0.425 0.427 0.427	0.206
FLAPWT=26.5	DEXT	1.110 1.140 1.160 1.160 1.150 1.150 1.150 1.160 1.160 1.160 1.160 1.160 1.160	1.150
PHASE=2	LACT	0.018 0.020 0.020 0.020 0.019 0.018 0.018 0.017 0.017 0.015 0.013	0.012
	MEAN	1.05 1.11 1.11 1.18 0.082 0.083 0.089 0.095 0.096 0.098 0.098	1.00
'SIDE=95-223-9-L	MED	24.00 25.00	35.6
	BP MEAN	72 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	94
5 ANIMA	ART MEDPH	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	7.4
DATE=05/03/95	HUMI	44,43,94,44,43,94,44,43,94,44,43,94,44,43,94,44,44,44,44,44,44,44,44,44,44,44,44,	39.7
DATE=(AIR	\$3.55.55.55.55.55.55.55.55.55.55.55.55.55	35.9
FLAPN0=2548	REL- TIME	-1.00 -0.75 -0.25 -0.25 -0.25 -0.00 -1.50	6.50
· FLAP	ACTL TIME	9:30 9:45 10:00 10:15 10:30 11:30 12:30 13:30 14:30 15:30 16:30	17:00
	TARG	9:30 9:45 10:00 10:15 10:30 11:30 12:30 13:30 14:30 14:30 16:00 16:00 16:30	17:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

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	GLUC	6.30 6.30 6.47		CUM	0.01	1.09	2.31	3.42	4.15	4.85	5.26	5.57	5.73 5.92 6.05	6 1 8 9 1	CUM	0.01 0.17 0.35 0.55
NCSU=Yes	GLUC	0.36 0.38 0.33	NCSU=Yes	GLUC	1.42 0.79	1.13 5.15 5.15	0.92	0.59	0.75	0.64	0.46	0.27	0.33 0.39 0.25	NCSU=Yes -	GLUC	1.17 0.74 0.71 0.81
	ADJ RESIS	61.8 60.3 64.4	MEDVOL=468	ADJ RESIS	44.6 59.5 37.5	33.4	32.0	65.0 50.8	45.6	41.7	35.9	45.9	45.7		ADJ RESIS	39.1 37.0 33.2 33.2 35.9
MEDVOL=399	ADJ	0.76 0.80 0.78		ADJ FLOW	0.99 0.67 0.96	1.02	1.06	0.78	0.94	0.98	1.14	0.92	0.92	MEDVOL=533	ADJ FLOW	1.41 1.13 1.15 1.06
GROUP=EtOH	VRE- SIST	47.5	GROUP=No Topical	VRE- SIST	40.2 53.7 33.8	30.1	28.8	58.6 45.8	41.1	37.6	32.4	4.14	41.2 41.0 42.9	GROUP=E tOH	VRE- SIST	40.1 38.0 34.1 34.1 36.9
	LACT	1.06	GROUP=N	LACT	0.25	0.87	1.00	5.6	1.03	0.95	70.	1.25	0.97		LACT	0.30 0.48 0.71 0.77
DOSETIME=10:30	DEXT ROSV	0.991 0.989 0.997	E=10:30	DEXT ROSV	0.699	0.785	0.749	0.838	0.868	0.930	1.010	0.994	0.955	DOSETIME=10:00	DEXT	0.850 0.921 0.940 0.899 0.857
	LACT	0.180 0.161 0.144	DOSETIME=10:30	LACT	0.143 0.249 0.312	0.355	0.424	0.300	0.282	0.232	0.166	0.148	0.138		LACT	0.117 0.142 0.187 0.236 0.304
FLAPWT=26.5 nued)	DEXT	1.150 1.150 1.140	FLAPWT=21.35	DEXT	1.160	1.160	1.140	1.080	1.10	1.140	1.140	1.090	1.080	FLAPWT=22.39	DEXT	1.170
PHASE=2 FLAPW (continued)	LACT	0.011 0.005 0.002		LACT	0.029	0.029	0.034	0.035	0.033	0.032	0.031	0.028	0.027	PHASE=2 FL	LACT	0.021 0.022 0.024 0.026 0.028
	MEAN	1.04	PHASE=1	MEAN	1.10	1.13	1.18	0.87	2.0.7	1.09	1.27	1.05	1.02 1.05 0.96		MEAN	1.37 1.11 1.15 1.03
'SIDE=95-223-9-L	MED	35.6 35.6 35.6	E=95-221-5-R	MED	36.3 35.4 35.4	35.6 35.8 35.8	35.7	35.7	35.7	35.8	35.8	35.7	35.7	SIDE=95-221-5-L	MED TEMP	35.2 35.6 35.6 35.6
	8P MEAN	44 48 50	IDE=95-	BP MEAN	40 4 20 40 30 40 30 30 40 30 50 30 40 30 30 30 30 30 30 30 30 30 30 30 30 30	7 % t	33 35	2 4 3	1 th 3	23	12:	77	43 43 43		BP	55 42 38 38 38
ANIMAL,	ART Medph	7.4 7.4 7.4	ANIMAL/SID	ART MEDPH	7.4	7.4	7.4	7.4	4.4.4	7.4	7.4	7.4	7.4	ANIMAL/	ART MEDPH	4.7.7.4.7.7.4.4.7.4.4.4.4.4.4.4.4.4.4.4
DATE=05/03/95	HUMI	39.2 41.1 41.5		HUMI	46.8 47.0 45.8	45.5	44.4	42.6	42.6	42.9	42.9	42.7	43.4	DATE=05/04/95	HUMI	38.6 38.4 39.1 38.8
DATE=0	AIR TEMP	35.9 35.9 36.0	DATE=05/04/95	AIR TEMP	36.1 35.7 35.8	35.8	36.1	36.2	36.3	36.3	36.4	36.4 36.4	36.3 36.2 36.2	DATE=05	AIR	35.7 36.3 36.4 36.4
FLAPNO=2548	REL- TIME	7.00 7.50 8.00		REL- TIME	-1.00	0.02	1.50	2.50	3.50	2.50	5.50	6.50	7.00		REL- TIME	-0.72 -0.50 -0.25 0.00 0.50
FLAPI	ACTL TIME	17:30 18:00 18:30	FLAPN0=2549	ACTL TIME	9:30 9:45 10:00	10:15	11:30	12:30	14:00	15:00	16:00	16:30 17:00	17:30 18:00 18:30	FLAPN	ACTL	9:17 9:30 9:45 10:00
	TARG	17:30 18:00 18:30	:	TARG	9:30 9:45 10:00	10:15	11:30	12:30	14:00	15:00	16:00	16:30 17:00	17:30 18:00		TARG	9:15 9:30 9:45 10:00 10:30
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TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

THE ACT REL ALPHO-250 DATE-05/04/95 MAINAL/SIDE-95-221-5-1. PARASE-2 FLAPM-22.99 DOSETINE-010:00 GROUP-ECON MEDIVAL-533 NCSU-Ness Continued) THE THE THE THE THE THE DITY MEDIN MEN THE FLAM ATEN ROSA ATEN R	1	CUN	1.33 1.69 2.05 2.38	2.69 3.13 3.33	4.34 4.34 4.31 4.31 4.31		CUM	0.01 0.19 0.35 0.51 0.70 1.13	
TARGE ACT 1800 1-253 ONTE-OF ALIMAL/SIDE-95-221-5-1 PANSE-2 FLAPMT-22.39 DOSETINE-10:00 GROUP-ECON MEDIOL-533 Coordinada) Targe 1100 1-100 15-7 18-2 1-	:- sa-:-	GLUC	0.71 0.72 0.71 0.67	0.61 0.47 0.42 0.40	0.42 0.25 0.25 0.36	NCSU=Yes	GLUC	0.76 0.65 0.65 0.78 0.85	0.83 0.83 0.78 0.58 0.50 0.33
THE THE THE THE THE PLAY NATION STORES AND MALES THAN THE TOTAL THAN A REPORT AND THE TOTAL THAN A REPORT AND THAN THE TOTAL THAN A REPORT AND THAN THAN THE TOTAL THAN A REPORT AND THAN THAN THAN THAN THAN THAN THAN THAN		ADJ RESIS	32.6 33.3 35.9 35.9	39.1 37.7 39.5 38.2	38.6 37.7 36.5 35.1	VOL=439	ADJ RESIS	89.0 84.1 82.9 87.6 88.7 78.4	74.0 74.0 74.0 78.0 89.2 89.5 97.0 97.0 123.0
TARGE ACTT REL- AIR HUMAL/SIDE-95-221-5-1. PHASE-2 FLAPMT=22.39 DOSETIME=10:00 CONTINUED) THE THE THE THE THE PITTY MEDPH HEAM TEMP FLOA ATEA BOSA ATEV ROSY 11:00 11:00 36.7 38.6 7.4 35 35.7 10.2 0.032 11:50 0.336 0.880 12:30 13:30 1	MEDVOL	ADJ FLOW	1.04 1.02 0.98 1.06	1.02	1.12		ADJ FLOW	0.79 0.82 0.81 0.81 0.84	0.82 0.88 0.89 0.87 0.83 0.83 0.83
TARGE ACTT REL- AIR HUMAL/SIDE-95-221-5-1. PHASE-2 FLAPMT=22.39 DOSETIME=10:00 CONTINUED) THE THE THE THE THE PITTY MEDPH HEAM TEMP FLOA ATEA BOSA ATEV ROSY 11:00 11:00 36.7 38.6 7.4 35 35.7 10.2 0.032 11:50 0.336 0.880 12:30 13:30 1	P=EtOH	VRE- SIST	33.5 34.2 36.8 36.9	40.2 38.7 40.6 39.2	39.6 38.4 37.4 36.0	lo Topic	VRE- SIST	7.1.2 7.1.1 7.1.2 7.1.3	62.6 62.6 63.2 65.2 75.7 77.0 77.0 82.7 82.8 82.8 82.8 82.8
TARG ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR NUML ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM LUMBER ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM LUMBER ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM LUMBER ATER ROSA AIR LUMBER AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM LUMBER AIR ROSA AIR LUMBER AIR LUMBER AIR ROSA AIR LUMBER AIR LUMBER AIR LUMBER AIR ROSA AIR LUMBER AIR LUMBER AIR ROSA AIR LUMBER AIR LUMBER AIR ROSA AIR LUMBER AIR LUMB		LACT	1.01 1.02 1.03 0.95	0.96 1.08 1.13	1.65	GROUP=N	LACT	0.49 0.73 0.98 0.98	0.95 0.95 0.95 0.95 0.98 0.98
TARG ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM LACT DEXT LUMBER ACTL REL- AIR NUML ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR NUML ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM LUMBER ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM LUMBER ATER ROSA AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM LUMBER ATER ROSA AIR LUMBER AIR LUMBER ACTL REL- AIR HUMI ART BP HED HEM LUMBER AIR ROSA AIR LUMBER AIR LUMBER AIR ROSA AIR LUMBER AIR LUMBER AIR LUMBER AIR ROSA AIR LUMBER AIR LUMBER AIR ROSA AIR LUMBER AIR LUMBER AIR ROSA AIR LUMBER AIR LUMB	IME=10:0	DEXT ROSV	0.880 0.880 0.880	0.922 0.976 0.978 0.997	1.010 1.020 0.984 0.904 0.858	=11:00	DEXT	0.834 0.891 0.885 0.853 0.853 0.839	0.842 0.842 0.842 0.953 0.958 1.040 1.040 1.080
TARG ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT (Continued) TARG ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT (Continued) TING 11:00 1:00 36.7 38.6 7.4 34 35.7 1.02 0.032 1.150 (1:200 12:00 2.00 36.8 37.6 7.4 34 35.7 1.02 0.032 1.150 (1:200 12:00 2.00 36.8 37.6 7.4 34 35.8 1.00 0.032 1.150 (1:200 12:00 2.00 36.8 37.6 7.4 40 35.8 1.00 0.032 1.150 (1:200 12:00 2.00 36.8 37.6 7.4 41 35.8 1.00 0.032 1.150 (1:200 12:00 2.00 36.8 37.6 7.4 41 35.8 1.00 0.032 1.150 (1:200 12:00 2.00 36.8 37.6 7.4 41 35.8 1.00 0.032 1.150 (1:200 12:00 2.00 36.8 37.6 7.4 41 35.8 1.00 0.032 1.150 (1:200 12:00 2.00 36.8 37.6 7.4 41 35.8 1.00 0.032 1.150 (1:200 12:00 2.00 36.8 37.6 7.4 41 35.9 1.05 0.032 1.150 (1:200 12:00 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37		LACT	0.292 0.308 0.322 0.260	0.251 0.202 0.192	0.181 0.172 0.170 0.144 0.144	DOSETIME	LACT	0.183 0.234 0.269 0.298 0.341 0.359	0.351 0.352 0.352 0.250 0.253 0.253 0.176 0.163
TARG ACTL REL- AIR HUMI ARI BP HED HEAN LAGGORD CONTINUE TIME TIME THE DITY MEDPH HEAN TEMP FLOW ATTENTION 11:00 11:00 10:00 36.8 38.0 7.4 34 35.7 1.02 0.023 12:00 2.50 36.8 38.0 7.4 34 35.8 1.00 0.033 12:00 13:00 3.6.8 38.0 7.4 34 35.8 1.00 0.033 12:00 13:00 3.6.8 38.0 7.4 34 35.8 1.00 0.033 12:00 13:00 3.6.8 38.0 7.4 41 35.0 1.03 0.033 12:00 13:00 3.6.8 38.0 7.4 41 35.0 1.03 0.033 12:00 13:00 3.6.8 38.0 7.4 41 35.0 1.03 0.033 12:00 13:00 3.6.8 38.0 7.4 41 35.0 1.04 0.033 12:00 13:00 3.00 3.6.8 38.0 7.4 41 35.0 1.04 0.033 12:00 13:00 5.00 37.0 37.0 37.0 37.0 37.0 37.0 37.0 3	WT=22.39	DEXT				-23.95	DEXT		
TARG ACTL REL- AIR HUMI ART BP MED MEMN TIME TIME TIME TIME TIME TEMP DITY MEDPH MEAN TEMP FLOW TI:00 11:00 11:00 10.00 36.7 38.2 7.4 34 35.7 1.02 (11:30 11:30 11:30 11:30 10.50 36.8 38.7 7.4 34 35.8 1.00 (12:00 12:30 2.00 36.8 38.7 7.4 38 36.7 1.02 (11:30 11:30 11:30 11:30 11:30 11:30 36.8 37.6 7.4 34 35.8 1.00 (12:30 12:30 2.00 36.8 37.6 7.4 41 35.8 1.00 (12:30 12:30 2.00 36.8 37.6 7.4 41 35.9 1.00 (12:30 12:30 2.00 36.8 37.6 7.4 41 35.9 1.00 (12:30 12:30 2.00 36.8 37.6 7.4 41 35.9 1.00 (12:30 12:30 2.00 36.8 37.6 7.4 41 35.9 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 37.0 37.0 37.0 7.4 41 35.0 1.00 (12:30 12:30 12:30 12:30 37.0 37.0 38.6 7.4 40 35.0 1.00 (12:30 12:	7	LACT	.032	.032	.031 .032 .028 .026 .019	FLAPWT	LACT	0.023 0.023 0.024 0.025 0.025	0.022 0.022 0.022 0.016 0.016 0.016 0.016
TARG ACTL REL- AIR HUMI ART BP MED III TIME TIME TIME TIME TEMP DITTY MEDPH MEAN TEMP III TIME TIME TIME TEMP DITTY MEDPH MEAN TEMP III TIME TIME TIME TEMP DITTY MEDPH MEAN TEMP III TIME TIME TIME TEMP DITTY MEDPH MEAN TEMP III TIME TIME TIME TIME TIME TIME TIME	PHASE	IEAN ILOW				HASE=1	MEAN FLOW		
TARG ACTL REL- AIR HUMI AR TIME TIME TIME TEMP DITY MED 11:00 11:00 12:00 36.7 38.2 7.12:00 12:00 2.00 36.8 38.0 7.7 12:00 12:30 2.50 36.8 38.0 7.7 12:30 12:30 2.50 36.8 38.0 7.12:30 12:30 2.50 36.8 37.6 7.12:30 12:30 2.50 36.8 37.6 7.12:30 12:30 12:30 2.50 36.8 37.6 7.12:30 12:30 12:30 2.50 36.8 37.0 7.12:30 12:30 12:30 2.50 36.8 37.0 7.12:30 12:30 12:30 2.50 36.8 37.0 7.12:30 12:30 12:30 2.50 37.0 37.0 7.12:30 12:30 12:30 2.50 37.0 37.0 7.12:30 12:30 12:30 2.50 37.0 37.0 7.12:30 12:30 12:30 2.50 35.0 44.3 7.12:30 12:30 12:30 2.50 35.0 44.3 7.12:30 12:30 12:30 2.50 35.0 44.3 7.12:30 12:30 12:30 2.50 35.0 42.3 7.12:30 12:30 12:30 35.0 42.3 7.12 7.12:30 12:30 12:30 35.0 42.3 7.12:30 12:30 12:30 35.0 42.3 7.12 7.12:30 12:30 12:30 35.0 42.3 7.1	i-221-5-L								
TARG ACTL REL- AIR HUMI AR TIME TIME TIME TEMP DITY MED 11:00 11:00 12:00 36.7 38.2 7.12:00 12:00 2.00 36.8 38.0 7.7 12:00 12:30 2.50 36.8 38.0 7.7 12:30 12:30 2.50 36.8 38.0 7.12:30 12:30 2.50 36.8 37.6 7.12:30 12:30 2.50 36.8 37.6 7.12:30 12:30 12:30 2.50 36.8 37.6 7.12:30 12:30 12:30 2.50 36.8 37.0 7.12:30 12:30 12:30 2.50 36.8 37.0 7.12:30 12:30 12:30 2.50 36.8 37.0 7.12:30 12:30 12:30 2.50 37.0 37.0 7.12:30 12:30 12:30 2.50 37.0 37.0 7.12:30 12:30 12:30 2.50 37.0 37.0 7.12:30 12:30 12:30 2.50 35.0 44.3 7.12:30 12:30 12:30 2.50 35.0 44.3 7.12:30 12:30 12:30 2.50 35.0 44.3 7.12:30 12:30 12:30 2.50 35.0 42.3 7.12:30 12:30 12:30 35.0 42.3 7.12 7.12:30 12:30 12:30 35.0 42.3 7.12:30 12:30 12:30 35.0 42.3 7.12 7.12:30 12:30 12:30 35.0 42.3 7.1	S1DE=95					E=95-22	BP SEAN 1		
TARG ACTL REL- AIR HUMI TIME TIME TIME TEMP DITY M 11:00 11:00 1.00 36.7 38.2 11:30 12:30 2.00 36.8 38.7 12:30 12:30 2.00 36.8 37.5 12:30 12:30 2.00 36.8 37.5 12:30 12:30 2.00 36.8 37.5 14:30 12:30 2.00 36.8 37.5 14:30 12:30 3.00 36.8 37.5 14:30 12:30 3.00 3.00 36.8 37.5 15:30 12:30 3.00 36.8 37.0 16:30 16:30 6.00 37.0 37.7 15:30 16:30 6.00 37.0 37.7 15:30 16:30 6.00 37.0 37.7 17:30 17:30 17:30 6.50 37.0 37.7 18:00 10:00 -1.00 37.0 37.0 10:10 10:00 -1.00 37.0 37.0 10:10 10:10 -1.00 35.7 44.1 10:15 10:15 -0.75 35.6 44.3 10:20 12:30 12:30 1.50 35.9 42.2 11:30 12:30 12:30 1.50 35.9 42.2 12:30 12:30 12:30 1.50 35.0 42.3 12:30 12:30 12:30 1.50 35.0 42.3 12:30 12:30 12:30 1.50 35.0 42.3 12:30 12:30 12:30 3.00 35.0 42.3 12:30 12:30 12:30 3.00 35.0 42.3 12:30 12:30 12:30 3.00 36.0 42.5 12:30 12:30 12:30 3.00 36.0 42.3 12:30 12:30 12:30 3.00 36.0 42.3 12:30 12:30 12:30 3.00 36.0 42.3 12:30 12:30 12:30 36.0 42.3 12:30 12:30 12:30 36.0 42.3 12:30 12:30 12:30 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 12:30 36.0 42.3 12:30 12:30 12:30 36.0 42.3 12:30 12:30 12:30 36.0 42.3 12:30 12:30 12:30 36.0 42.3 12:30 12:30 12:30 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 36.0 36.0 42.3 12:30 12:30 36.0 42.3 12:30 12:30 36.0 42.3 12:30 12:30 36.0 42.3	AN I MAL	_ - - -	4.7.4 7.3 4.7	44444	14444K	_	ST OPH	444444	*************
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TARG ACTL REL- TIME TIME TIME 11:00 11:00 1.00 12:00 12:00 2.00 12:00 12:00 2.50 13:00 13:00 3.00 13:30 13:30 3.00 14:30 14:30 4.00 15:30 15:30 5.50 16:30 16:30 6.00 15:30 17:30 7.00 17:30 17:30 7.00 17:30 17:30 7.00 17:30 17:30 1.00 17:30 17:30 1.00 17:30 17:30 6.00 17:30 17:30 1.00 17:30 17:30 1.00 17:30 17:30 1.00 17:30 17:30 1.00 17:30 17:30 1.50 10:30 10:30 0.50 11:30 12:30 1.50 12:30 12:30 1.50	ATE=05/	AIR				=05/11/	AIR	35.7 35.7 35.8 35.8	35.9 35.9 35.0 35.0 35.0 35.0 35.0 35.0
11:30 11:30 12:30 13:30 14:30 15:30 17:30		REL- TIME	1.00 1.50 2.00 2.50	3.00 3.50 4.50	6.50 6.50 8.50 8.00	53 DATE	REL- TIME	-1.00 -0.75 -0.25 0.00 1.00	2.50 2.50 2.50 2.50 2.50 2.50 2.50 3.50 3.50 3.50 3.50 3.50 3.50 3.50 3
11:30 11:30 12:30 13:30 14:30 15:30 17:30	FLAPNO	ACTL TIME	1:00 1:30 2:00 2:30	3:00	15:30 16:30 17:30 18:00	APN0=25	ACTL TIME		
		TARG					TARG		

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING SHADY SIDE PIGS AND SIGMA BSA

SUL	0.01	0.22	0.29	0.36	0.51	0.68	0.83	96.0	1.12	1.26	1.40	1.52	1.68	1.86	2.01	2.19	2.37	2.39	2.58	2.81
GLUC	0.66	0.33	0.27	0.27	0.30	0.35	0.29	0.26	0.32	0.27	0.29	0.24	0.32	0.35	0.30	0.36	0.35	0.05	0.38	0.45
ADJ RESIS	88.4	54.8	52.9	53.5	51.2	54.3	24.0	55.4	55.6	48.5	9.09	61.0	57.3	53.1	60.3	265	60.4	63.3	61.5	63.0
ADJ FLOW	0.98	0.95	0.93	0.95	96.0	0.94	0.93	0.90	0.93	0.95	0.91	0.93	1.01	1.00	96.0	0.97	0.94	0.92	0.94	0.92
VRE- SIST	80.2	8.65	48.0	48.6	4.94	49.3	0.65	50.3	50.5	44.0	55.0	55.3	52.0	48.2	24.7	54.2	54.8	57.4	55.8	57.1
LACT	0.16	0.71	1.05	1.10	1.1	0.95	1.25	1.32	1.03	1.12	1.12	1.39	1.10	0.99	1.13	0.94	0.91	6.95	1.40	0.92
DEXT ROSV	0.936	1.060	1.080	1.070	1.070	1.060	1.070	1.070	1.070	1.070	1.080	1.110	1.080	1.090	1.110	1.090	1.090	1.210	1.060	1.060
LACT	0.065	0.111	0.133	0.136	0.151	0.154	0.168	0.161	0.152	0.140	0.150	0.151	0.146	0.143	0.147	0.143	0.140	0.161	0.218	0.183
DEXT	1.170	1.180	1.180	1.170	1.180	1.190	1.180	1.170	1.190	1.170	1.190	1.200	1.190	1.210	1.220	1.220	1.220	1.230	1.200	1.230
LACT	0.028	0.026	0.028	0.026	0.029	0.030	0.030	0.029	0.029	0.028	0.027	0.026	0.025	0.024	0.023	0.021	0.022	0.022	0.022	0.026
MEAN	1.09	1.05	1.02	1.05	1.06	1.04	1.02	1.00	1.03	1.05	1.00	1.03	1.12	1.10	1.06	1.07	1.04	1.01	1.04	1.02
MED	36.4	36.3	36.3	36.3	36.3	36.3	36.6	36.6	36.3	36.3	36.2	36.1	36.1	36.3	36.3	36.3	36.3	36.3	36.3	36.3
BP	87	52	67	51	65	51	20	20	25	46	55	22	28	23	28	28	25	28	28	28
ART Medph	7.4	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4
HUMI DITY	38.3	38.1	37.7	37.6	37.5	37.8	37.2	38.1	37.2	37.1	37.3	38.0	38.0	36.7	36.9	37.6	43.2	38.0	38.0	37.6
AIR TEMP	37.3	37.5	37.6	37.4	37.5	37.6	37.7	37.6	37.6	37.6	37.5	37.7	37.5	37.6	37.6	37.6	37.6	37.6	37.6	37.6
REL- TIME	-1.00	-0.50	-0.25	0.00	0.50	1.00	1.50	5.00	2.50	3.00	3.50	7.00	4.50	2.00	5.50	9.00	6.50	2.00	7.50	8.00
ACTL TIME	9:30	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
TARG	9:30	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	: ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT DEXT LACT VRE- ADJ ADJ GLUC : TIME TIME TEMP DITY MEDPH MEAN TEMP FLOW ATEA ROSA ATEV ROSV DEXT SIST FLOW RESIS UTIL O	ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT DEXT LACT VRE- ADJ ADJ GLUC TIME TEMP DITY MEDPH MEAN TEMP FLOW ATEA ROSA ATEV ROSV DEXT SIST FLOW RESIS UTIL C 9:30 -1.00 37.3 38.3 7.4 87 36.4 1.09 0.028 1.170 0.065 0.936 0.16 80.2 0.98 88.4 0.66 (ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT DEXT LACT VRE- ADJ ADJ GLUC TIME TEMP DITY MEDPH MEAN TEMP FLOW ATEA ROSA ATEV ROSV DEXT SIST FLOW RESIS UTIL C 9:30 -1.00 37.3 38.3 7.4 87 36.4 1.09 0.028 1.170 0.065 0.936 0.16 80.2 0.98 88.4 0.66 0 9:45 -0.75 37.5 38.1 7.4 56 36.4 1.10 0.025 1.210 0.091 1.030 0.37 51.1 0.99 56.4 0.52 0 10:00 -0.50 37.5 38.1 7.3 52 36.3 1.05 0.026 1.180 0.111 1.060 0.71 49.8 0.95 54.8 0.33 0	ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT DEXT LACT VRE- ADJ ADJ GLUC TIME TEMP DITY MEDPH MEAN TEMP FLOW ATEA ROSA ATEV ROSV DEXT SIST FLOW RESIS UTIL C 9:30 -1.00 37.3 38.3 7.4 87 36.4 1.09 0.028 1.170 0.065 0.936 0.16 80.2 0.98 88.4 0.66 0.945 -0.75 37.5 38.1 7.4 56 36.4 1.10 0.025 1.210 0.091 1.030 0.37 51.1 0.99 56.4 0.52 0.945 10:00 -0.50 37.5 38.1 7.3 52 36.3 1.05 0.026 1.180 0.111 1.060 0.71 49.8 0.95 54.8 0.33 0.10 10:15 -0.25 37.6 37.7 7.3 49 36.3 1.02 0.028 1.180 0.133 1.080 1.05 48.0 0.93 52.9 0.27 0.	ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT DEXT LACT VRE- ADJ ADJ GLUC TIME TEMP DITY MEDPH MEAN TEMP FLOW ATEA ROSA ATEV ROSV DEXT SIST FLOW RESIS UTIL C 9:30 -1.00 37.3 38.3 7.4 87 36.4 1.09 0.028 1.170 0.065 0.936 0.16 80.2 0.98 88.4 0.66 0.945 -0.75 37.5 38.1 7.4 56 36.4 1.10 0.025 1.210 0.091 1.030 0.37 51.1 0.99 56.4 0.52 0.945 0.050 0.57 37.5 38.1 7.3 52 36.3 1.05 0.026 1.180 0.111 1.060 0.71 49.8 0.95 54.8 0.33 0.07 0.05 0.05 37.5 37.5 38.1 7.3 49 36.3 1.02 0.028 1.180 0.133 1.080 1.05 48.0 0.93 52.9 0.27 0.07 0.30 0.00 37.4 37.6 7.4 51 36.3 1.05 0.026 1.170 0.136 1.070 1.10 48.6 0.95 53.5 0.27 0.027 0.028 0.036 0.036 0.008 0	ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT DEXT LACT VRE- ADJ ADJ GLUC TIME TEMP DITY MEDPH MEAN TEMP FLOW ATEA ROSA ATEV ROSV DEXT SIST FLOW RESIS UTIL C 9:30 -1.00 37.3 38.3 7.4 87 36.4 1.09 0.028 1.170 0.065 0.936 0.16 80.2 0.98 88.4 0.66 0.945 -0.75 37.5 38.1 7.4 56 36.4 1.10 0.025 1.210 0.091 1.030 0.37 51.1 0.99 56.4 0.52 0.945 1.000 -0.50 37.5 38.1 7.3 52 36.3 1.05 0.026 1.180 0.111 1.060 0.71 49.8 0.95 54.8 0.33 0.07 0.05 37.5 37.5 7.3 49 36.3 1.02 0.028 1.180 0.133 1.080 1.05 48.0 0.93 52.9 0.27 0.00 37.4 37.6 7.4 51 36.3 1.05 0.026 1.170 0.136 1.070 1.11 46.4 0.96 51.2 0.30 0.11 0.05 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.00 37.5 37.5 7.4 49 36.3 1.06 0.029 1.180 0.151 1.070 1.11 46.4 0.96 51.2 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.	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REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT VRE- ADJ ADJ ADJ GLUC TIME TIME TEMP DITY MEDPH MEAN TEMP FLOW ATEA ROSA ATEV ROSV DEXT SIST FLOW RESIS UTIL 9:30 -1.00 37.3 38.3 7.4 87 36.4 1.09 0.028 1.170 0.095 0.936 0.16 80.2 0.98 88.4 0.66 9:45 -0.75 37.5 38.1 7.4 56 36.4 1.10 0.025 1.210 0.091 1.030 0.37 51.1 0.99 56.4 0.52 10:00 -0.50 37.5 38.1 7.4 56 36.4 1.10 0.025 1.210 0.091 1.030 0.37 51.1 0.99 56.4 0.52 10:30 0.00 37.5 37.7 7.3 52 36.3 1.05 0.026 1.180 0.111 1.060 0.71 49.8 0.95 54.8 0.33 10:15 -0.25 37.6 37.7 7.3 49 36.3 1.05 0.028 1.180 0.134 1.070 1.10 48.6 0.95 54.8 0.37 11:30 0.00 37.6 37.5 7.4 49 36.3 1.05 0.028 1.180 0.154 1.000 0.95 49.3 0.95 54.9 0.27 11:30 1.00 37.6 37.7 7.4 51 36.3 1.05 0.028 1.180 0.154 1.000 0.95 49.3 0.95 54.3 0.35 11:30 1.00 37.6 37.7 7.4 50 36.6 1.00 0.029 1.190 0.154 1.000 1.25 49.0 0.95 54.3 0.35 11:30 2.00 37.6 37.7 7.4 50 36.6 1.00 0.029 1.170 0.161 1.070 1.12 46.4 0.96 51.2 13:30 2.00 37.6 37.7 7.4 50 36.6 1.00 0.029 1.170 0.161 1.070 1.12 44.0 0.95 48.5 0.22 14:00 37.6 37.7 7.4 50 36.6 1.00 0.027 1.190 0.154 1.000 0.95 49.3 0.94 54.5 0.32 14:00 37.6 37.7 7.4 55 36.3 1.05 0.028 1.170 0.161 1.070 1.12 44.0 0.95 48.5 0.22 14:00 37.6 37.7 37.3 7.4 55 36.3 1.05 0.028 1.170 0.161 1.070 1.12 44.0 0.95 48.5 0.22 14:00 37.6 37.7 37.3 7.4 55 36.3 1.05 0.028 1.170 0.161 1.070 1.12 50.0 0.91 60.6 0.22 14:00 4.00 37.7 38.0 7.3 58.0 7.3 58.1 1.12 0.025 1.200 0.151 1.110 1.39 55.3 0.30 6.31 0.35 15:00 4.00 37.6 36.7 7.4 58 36.3 1.10 0.024 1.210 0.143 1.090 0.99 48.2 1.00 53.1 0.35 16:00 6.00 37.6 45.2 7.4 57 36.3 1.01 0.022 1.220 0.147 1.110 1.55 60.97 60.4 60.4 0.35 16:00 6.00 37.6 43.2 7.4 57 36.3 1.07 0.022 1.220 0.147 1.110 1.50 0.97 54.7 0.97 59.7 0.35 16:00 6.00 37.6 43.2 7.4 57 36.3 1.07 0.022 1.220 0.147 1.110 1.99 6.09 6.04 60.4 0.35</td> <td>ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT VRE- ADJ ADJ ADJ GLUC TIME TIME TIME TEMP DITY MEDH MEAN TEMP FLOM ATEA ROSA ATEA ROSY DEXT SIST FLOM RESIS UTIL 0.066 0.935 0.16 BOLZ 0.98 BB-4 0.666 0.925 0.17 0.99 56.4 0.52 0.00<</td> <td> Name Color Color</td>	ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT VRE- ADJ ADJ GLUC TIME TIME TEMP DITY MEDPH MEAN TEMP FLOW ATEA ROSA ATEV ROSY DEXT SIST FLOW RESIS UTIL 9:30 -1.00 37.3 38.3 7.4 87 36.4 1.09 0.028 1.170 0.065 0.936 0.16 80.2 0.98 88.4 0.65 9:45 -0.75 37.5 38.1 7.4 56 36.4 1.10 0.028 1.180 0.11 1.050 0.71 49.8 0.95 54.8 0.52 10:10 0.028 1.180 0.136 1.00 0.028 1.180 0.136 1.00 0.95 54.8 0.95 54.8 0.57 10:10 0.50 37.6 5.7 5.4 5.3 1.05 0.028	ACTL REL- AIR HUMI ART BP MED MEAN LAGT DEXT LAGT VRF- ADJ ADJ ADJ GLUC TIME TIME	ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT VRE- ADJ ADJ GLUC TIME TIME TEMP DITY MEDH MEAN TEMP FLOW ATEA ROSA ATEV ROSA DEXT SIST FLOW RESIS DITL 0.066 0.936 0.16 BOL 0.998 BB.4 0.066 0.998 0.11 0.099 56.4 0.566 0.028 1.170 0.055 0.71 49.8 0.99 56.4 0.566 0.028 1.170 0.011 1.030 0.37 51.1 0.99 56.4 0.56 0.028 1.180 0.111 1.060 0.77 49.8 0.95 54.8 0.56 1.00 0.028 1.180 0.111 1.060 0.99 54.8 0.056 51.8 0.11 1.000 0.71 49.8 0.95 54.8 0.056 1.100 0.014 1.100 0.014 1	ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT DEXT LACT DEXT LACT DEXT LACT DEXT LACT REL- ADJ ADJ ADJ GLUC 711ME TIME TIME	ACTL REL- AIR HUMI ART BP HED MEAN LACT DEXT LACT DEXT LACT VRE- ADJ ADJ ADJ GLUC TIME TIME	ACTI. REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT VRE- ADJ ADJ ADJ GLUC TIME TIME TEMP DITY MEDPH MEAN TEMP FLOW ATEA ROSA ATEV ROSV DEXT SIST FLOW RESIS UTIL 9:30 -1.00 37.3 38.3 7.4 87 36.4 1.09 0.028 1.170 0.095 0.936 0.16 80.2 0.98 88.4 0.66 9:45 -0.75 37.5 38.1 7.4 56 36.4 1.10 0.025 1.210 0.091 1.030 0.37 51.1 0.99 56.4 0.52 10:00 -0.50 37.5 38.1 7.4 56 36.4 1.10 0.025 1.210 0.091 1.030 0.37 51.1 0.99 56.4 0.52 10:30 0.00 37.5 37.7 7.3 52 36.3 1.05 0.026 1.180 0.111 1.060 0.71 49.8 0.95 54.8 0.33 10:15 -0.25 37.6 37.7 7.3 49 36.3 1.05 0.028 1.180 0.134 1.070 1.10 48.6 0.95 54.8 0.37 11:30 0.00 37.6 37.5 7.4 49 36.3 1.05 0.028 1.180 0.154 1.000 0.95 49.3 0.95 54.9 0.27 11:30 1.00 37.6 37.7 7.4 51 36.3 1.05 0.028 1.180 0.154 1.000 0.95 49.3 0.95 54.3 0.35 11:30 1.00 37.6 37.7 7.4 50 36.6 1.00 0.029 1.190 0.154 1.000 1.25 49.0 0.95 54.3 0.35 11:30 2.00 37.6 37.7 7.4 50 36.6 1.00 0.029 1.170 0.161 1.070 1.12 46.4 0.96 51.2 13:30 2.00 37.6 37.7 7.4 50 36.6 1.00 0.029 1.170 0.161 1.070 1.12 44.0 0.95 48.5 0.22 14:00 37.6 37.7 7.4 50 36.6 1.00 0.027 1.190 0.154 1.000 0.95 49.3 0.94 54.5 0.32 14:00 37.6 37.7 7.4 55 36.3 1.05 0.028 1.170 0.161 1.070 1.12 44.0 0.95 48.5 0.22 14:00 37.6 37.7 37.3 7.4 55 36.3 1.05 0.028 1.170 0.161 1.070 1.12 44.0 0.95 48.5 0.22 14:00 37.6 37.7 37.3 7.4 55 36.3 1.05 0.028 1.170 0.161 1.070 1.12 50.0 0.91 60.6 0.22 14:00 4.00 37.7 38.0 7.3 58.0 7.3 58.1 1.12 0.025 1.200 0.151 1.110 1.39 55.3 0.30 6.31 0.35 15:00 4.00 37.6 36.7 7.4 58 36.3 1.10 0.024 1.210 0.143 1.090 0.99 48.2 1.00 53.1 0.35 16:00 6.00 37.6 45.2 7.4 57 36.3 1.01 0.022 1.220 0.147 1.110 1.55 60.97 60.4 60.4 0.35 16:00 6.00 37.6 43.2 7.4 57 36.3 1.07 0.022 1.220 0.147 1.110 1.50 0.97 54.7 0.97 59.7 0.35 16:00 6.00 37.6 43.2 7.4 57 36.3 1.07 0.022 1.220 0.147 1.110 1.99 6.09 6.04 60.4 0.35	ACTL REL- AIR HUMI ART BP MED MEAN LACT DEXT LACT VRE- ADJ ADJ ADJ GLUC TIME TIME TIME TEMP DITY MEDH MEAN TEMP FLOM ATEA ROSA ATEA ROSY DEXT SIST FLOM RESIS UTIL 0.066 0.935 0.16 BOLZ 0.98 BB-4 0.666 0.925 0.17 0.99 56.4 0.52 0.00<	Name Color Color

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	SLUC	0.01 0.20 0.41 0.62 0.84 1.11	2.23 3.24 5.34 5.35 5.35 5.35		CUM GLUC 0.01 0.28 0.79 1.06 1.33 1.75 2.27 2.27 2.67 2.67 4.14 4.42 4.42
NCSU=Yes	GLUC	0.90 0.77 0.83 0.84 0.86 1.08	1.08 1.13 1.25 1.03 0.86 0.86	0.72 0.72 0.53 0.53 0.61 0.56 0.44	0.70 1.07 1.07 1.07 1.07 1.07 1.07 1.04 0.85 0.60 0.66
MEDVOL=363	ADJ RESIS	43.4 49.1 47.7 45.9 43.1 43.1	50.9 53.8 57.5 74.3 86.6	2 96.7 9 94.3 9 94.3 0 98.2 2 96.7 2 102.7 3 104.5	ADJ RESIS 31.8 33.18 28.3 29.8 26.7 26.7 35.3 37.5 42.8 47.1 54.7 56.7 65.3
	ADJ FLOW	0.67 0.59 0.51 0.57 0.70 0.70	0.69 0.65 0.68 0.71 0.71	ronornin	ADJ FLOW 1.04 1.03 1.20 1.14 1.15 0.91 0.87 0.87 0.87
GROUP=No Topical	VRE- SIST	30.4 34.3 33.3 32.1 30.2 30.2	33.5 37.6 40.2 42.6 52.0 60.6	1.14 66.0 0 1.23 63.4 0 1.05 69.7 0 1.07 68.7 0 1.13 71.8 0 1.12 73.1 0 GROUP=No Topical	VRE- SIST 28.3 29.6.3 26.6 23.8 24.8 31.5 28.3 31.5 42.1 42.1 48.8 56.9 56.9
GROUP=!	LACT	0.43 0.57 0.85 1.00 1.02	0.99 1.10 1.27 1.10 1.10	1.01 1.23 1.06 1.07 1.03 1.13 1.29	LACT DEXT 0.66 0.67 0.90 0.96 0.94 1.07 1.00
E=11:30	DEXT ROSV	0.682 0.714 0.693 0.657 0.669 0.702	0.687 0.680 0.624 0.608 0.695 0.796	0.404 0.878 0.345 0.878 0.312 0.920 0.284 0.956 0.203 0.913 0.305 0.936 0.272 0.936	DEXT ROSV 0.776 0.806 0.875 0.903 0.908 0.874 0.827 0.827 0.821 0.821 0.821
DOSETIME=11:30	LACT	0.206 0.260 0.343 0.420 0.486 0.480	0.518 0.545 0.636 0.656 0.619 0.439	0.365 0.365 0.288 0.284 0.303 0.305 0.272	LACT ATEV 0.183 0.282 0.278 0.314 0.353 0.358 0.368 0.368 0.368 0.368 0.260 0.260
FLAPWT=27.99	DEXT ROSA	1.120 1.140 1.140 1.150 1.210	1.200 1.190 1.190 1.210 1.200 1.180	017 1.160 019 1.220 018 1.160 022 1.210 022 1.210 018 1.190 017 1.150	DEXT ROSA 1.030 1.200 1.240 1.240 1.240 1.250 1.190 1.190 1.190 1.190
FLAPWI	LACT	0.017 0.001 0.001 0.004 0.009	0.010 0.012 0.016 0.016 0.016	000000	ATEA 0.015 0.015 0.016 0.017 0.017 0.017 0.018 0.018
PHASE=1	MEAN	0.96 0.85 0.87 0.84 1.00	0.98 0.98 0.97 1.01 1.04	1.04 1.04 1.04 1.04 1.04	MEAN FLOW 1.17 1.15 1.28 1.29 1.02 0.97 0.98 0.94
L/SIDE=95-65-11-R	MED	38.1 36.6 36.2 36.2 36.1 36.1	26.23 26.23 26.23 26.23 26.23 26.23	5 65 36.2 6 65 36.2 6 69 36.4 6 69 36.4 70 36.4 70 36.4 7 76 36.5 5 76 36.4	MED TEMP TEMP 36.3 36.2 35.8 35.8 36.2 36.2 36.3 36.3 36.3 36.3 36.3 36.3
.DE=95-	BP	228888	2525255	65 64 69 69 70 74 76	MEAN 32 32 34 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
ANIMAL/S	ART MEDPH	444444	4.6.6.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4		ART MEDPH 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4
	HUMI	52.4 50.3 50.2 50.2 50.2 69.3	46.3 47.8 47.8 46.2 40.8	9-0-1-10-18	HUMI 40.5 41.2 40.5 39.7 38.7 38.7 38.7 38.7 38.3 38.4 38.7
DATE=08/30/95	AIR	35.2 35.2 35.2 35.4 35.2	35.4 35.5 35.5 36.0	0 36.1 40 0 36.1 41 0 36.3 41 0 36.3 35 0 36.3 38 0 36.4 39 0 36.3 38	AIR 37.6 37.6 37.0 37.1 37.3 37.3 37.3 37.5 37.5 37.5 37.5
	REL- TIME	-1.25 -0.75 -0.50 -0.25 0.00	2.50 2.50 3.50 4.00 5.00	uononono	REL- 11.25 -1.05 -0.75 -0.55 -
FLAPN0=2555	ACTL TIME	10:15 10:30 10:45 11:00 11:15 11:30	12:30 13:30 14:30 15:30 15:30	16:30 5.17:00 5.17:00 5.17:00 5.18:30 6.19:30 7.19:30 8.19:30	ACTL TIME 10:00 10:15 10:35 11:15 11:15 11:15 12:15 12:15 13:15 14:15 15:15
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	TARG	10:15 10:30 10:45 11:00 11:15 12:00	12:30 13:00 14:30 15:00 15:00 15:00		TARG 10:00 10:15 10:15 11:15 11:15 12:15 13:15 14:15 15:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

;			;		:		
	CUM	6.41 6.68		CUM	0.01 0.17 0.38 0.38 0.58 1.21 1.21 1.22 2.50 2.50 4.35 4.35 4.35 6.13	OUM CUM	0.01
NCSU=Yes	GLUC	0.54 0.61 0.58 0.55 0.55	NCSU=Yes	GLUC	0.68 0.63 0.83 0.87 0.87 0.88 0.70 0.73 0.73 0.73 0.74 0.65 0.65 0.46 0.46	GLUC	0.69
MEDVOL=463	ADJ RESIS	56.9 59.1 61.3 59.3 56.6	MEDVOL=479	ADJ RESIS	36.9 36.9 37.2 37.2 37.2 37.2 37.3	ADJ RESIS	30.3
	ADJ FLOW	0.93 0.90 0.91 0.93 0.93		APJ FLOW	999 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	7 7	96.0
GROUP=No Topical	VRE- SIST	50.7 54.5 52.7 54.7 52.9 51.7	GROUP=No Topical	VRE- SIST	0.95 34.0 0.056 31.6 0.056 31.6 0.056 31.6 0.056 27.2 0.056 27.2 0.056 27.2 0.056 27.2 0.056 27.2 0.056 28.3 0.056 28.3 0.057 28.3 0	VRE- SIST	28.9
GROUP	LACT	1.15 1.00 1.04 1.08 1.10	GROUP=	LACT	0.34 0.036 0.036 0.097 0.097 0.097 0.099 0.099 0.098 0.098	LACT	0.39
E=11:15	DEXT	1.000 0.954 0.979 0.962 0.955 0.980	DOSETIME=11:01	DEXT	0.164 0.724 0.278 0.768 0.357 0.774 0.433 0.730 0.496 0.682 0.598 0.661 0.553 0.643 0.553 0.643 0.471 0.701 0.471 0.701 0.470 0.714 0.471 0.701 0.471 0.701 0.471 0.701 0.471 0.701 0.471 0.701 0.471 0.701 0.471 0.704 0.471 0.704 0.471 0.704 0.471 0.704 0.471 0.704 0.471 0.704 0.232 0.934 0.239 0.947	DEXT	0.754
DOSETIME=11:15	LACT	0.273 0.274 0.264 0.260 0.256 0.257	DOSETIM	LACT	0.164 0.278 0.357 0.496 0.508 0.529 0.543 0.555 0.477 0.477 0.477 0.478 0.372 0.372 0.372 0.280	LACT	0.193
FLAPWT=25.48 (continued)	DEXT	1.220 1.210 1.210 1.210 1.190 1.200	FLAPWT=35.5	DEXT	019 1.150 019 1.210 019 1.210 019 1.210 019 1.170 020 1.170 010 1.170 012 1.170 017 1.180 017 1.170 017 1.170 017 1.180 017 1.180 017 1.180 017 1.180 017 1.180	DEXT	1.200
1 FLAPW (contin	LACT	0.019 0.020 0.020 0.009 0.009		LACT		_ ~	0.018
PHASE=1	MEAN	1.05 1.01 1.03 1.02 1.05	PHASE=1	MEAN	0.95 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03	MEAN	1.01
ANIMAL/SIDE=95-65-11-L	MED	36.3 36.4 36.4 36.4 36.3 36.3	DE=95-65-10-R	MED	35.3 36.3 37.3 47.3	MED	34.4
IDE=95	BP	2 2 2 2 2 2 3 3 3 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SIDE=9!	BP MEAN	32 30 30 30 30 31 32 32 42 43 44 45 45 46 46 46 47	BP	53
IIMAL/S	ART MEDPH	77.77	AN IMAL/SI	ART	74444444444444444444444444444444444444	ART	7.3
	HUMI	39.1 38.9 37.6 39.1 39.4		HUMI	088744760000-4WW0R004	부논	44.1
DATE=08/30/95	AIR	37.5 37.5 37.5 37.7 37.7 37.6	DATE=08/31/95	AIR	2 36.0 43. 2 36.5 41. 2 36.5 41. 3 36.7 41. 3 36.7 41. 3 36.8 36.9 41. 3 37.1 40.0 40. 3 37.1 40.0 40. 3 37.1 40.0 40. 3 37.1 40.0 40. 3 37.1 40.0 40.	AIR TEMP	36.1
	REL- TIME	5.00 5.50 6.50 7.00 7.50 8.00		REL- TIME	0 L N N O 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0	교호	-1.00
FLAPN0=2556	ACTL TIME	16:15 17:15 17:45 18:15 19:45	FLAPN0=2557	ACTL	10:00 10:15 10:35 11:01 11:01 11:01 11:01 12:00 12:00 14:00 16:00 17:00 17:00 18:00 19:00	ACTL RE	9:42
	TARG	16:15 16:45 17:15 17:45 18:15 18:45 19:15		TARG	10:00 10:15 10:35 11:00 11:30 12:30 12:30 13:30 14:30 14:30 15:30 16:30 16:30 17:30 17:30 17:30 17:30 17:30	TARG	9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	FLAPNO=2558		DATE=08/31/95		ANIMAL/SIDE=95-65-10-L	DE=95-6	55-10-L	PHASE=1	3	FLAPWT=38.73 continued)	DOSETIM	DOSETIME=10:45	GROUP=N	GROUP=No Topical		MEDVOL=494	NCSU=Yes	6 9 0 2 0 8 9
TARG	ACTL TIME	REL- TIME	AIR TEMP	HUMI	ART MEDPH	BP MEAN	MED	MEAN	LACT	DEXT	LACT	DEXT	LACT	VRE- SIST	ADJ FLOW R	ADJ RESIS	GLUC UT1L	OUN CUM
10:00	10:00	-0.75	36.4	8.44	7.4	30	35.1	1.04	0.011	1.170	0.221	0.847	0.65	28.8	0.99	30.3	0.52	0.14
10:30	10:30	-0.25	34.9	43.4	7.4	\$ ₂	34.2	20.1	0.020	1.210	0.355	0.73	0.77	3.55	0.97	26.8	69.0	0.48
10:45	10:45	0.0	35.0	50.3	7.4	54	33.9	1.06	0.019	1.240	0.403	0.781	0.84	22.7	1.00	23.9	0.75	79.0
11:15	11:15	0.50	35.7	48.6	7.4	54	35.2	1.04	0.017	1.240	0.413	0.756	0.82	23.2	0.99	24.4	0.78	1.06
11:45	11:45	1.00	36.6	4.74	7.4	27	36.3	1.02	0.023	1.180	0.413	0.787	0.99	26.5	26.0	27.8	0.62	1.37
12:15	12:15	1.50	36.7	47.2	7.4	52	36.2	0.98	0.013	1.230	0.408	0.784	0.89	25.6	0.93	56.9	79.0	1.70
12:45	12:45	2.00	36.7	45.8	7.4	52	36.1	1.03	0.019	1.180	0.412	0.785	0.99	54.4	0.98	52.6	0.63	2.02
13:15	13:15	2.50	37.2	4.4.4	7.5	27	36.8	1.03	0.014	1.210	0.411	0.770	0.0	2.92	0.98	27.5	0.70	2.37
13:45	13:45	3.00	36.7	43.7	7.5	54	35.9	1.02	0.015	1.210	0.417	0.790	96.0	23.6	26.0	24.8	99.0	2.70
14:15	14:15	3.50	36.5	43.1	7.4	23	36.2	0.94	0.018	1.180	0.405	0.805	1.03	24.5	0.89	25.7	0.55	2.97
14:45	14:45	4.00	36.8	45.5	7.4	27	36.3	0.98	0.015	1.150	0.369	0.826	1.09	27.6	0.93	28.9	0.49	3.22
15:15	15:15	4.50	36.8	45.0	7.4	30	36.1	9.	0.014	1.200	0.344	0.851	0.95	30.2	0.95	31.7	0.54	3.49
15:45	15:45	2.00	36.8	45.4	7.3	8	36.3	0.98	0.014	1.200	0.340	0.878	1.01	59.6	0.93	31.1	0.49	3.73
16:15	16:15	5.50	36.7	45.4	7.4	28	36.3	0.98	0.013	1.190	0.295	0.910	1.01	28.6	0.93	30.0	0.43	3.94
16:45	16:45	6.00	36.8	42.7	7.4	28	36.3	0.98	0.013	1.190	0.287	0.934	1.07	28.6	0.93	30.0	0.39	4.14
17:15	17:15	6.50	36.8	45.6	7.4	22	36.4	0.98	0.012	1.180	0.264	0.956	1.13	27.6	0.93	28.9	0.34	4.31
17:45	17:45	7.00	36.7	45.4	7.5	28	36.4	0.98	0.015	1.200	0.258	0.958	9.0	28.6	0.93	30.0	0.37	67.4
18:15	18:15	7.50	36.7	45.6	7.4	27	36.4	0.98	0.010	1.190	0.257	0.964	1.09	27.6	0.93	28.9	0.34	99"4
18:45	18:45	8.00	36.8	43.1	7.4	28	36.4	1.01	600.0	1.190	0.260	0.962	1.10	27.9	96.0	29.3	0.35	78.4
	FLAPNO=2560		DATE=09/07/95		ANIMAL/SI		DE=95-65-9-L	PHASE=1		FLAPWT=40.82	DOSETIM	DOSETIME=10:30	GROUP=N	GROUP=No Topical		MEDVOL=475	NCSU=Yes	: : : : : : : : : : : : : : : : : : : :
TARG	ACTL	REL-	AIR	HUMI	ART	8	WED	MEAN	LACT	DEXT	LACT	DEXT	LACT	VRE-	Ab	ADJ	GLUC	Wno 3

1 1 1 2 4 1 1 1	W no	GLUC	0.01	0.13	0.29	0.44	0.61	96.0	1.30	1.62	1.97	2.28	2.53	2.77	2.97	3.16	3.32	3.48
NCSU=Yes	GLUC	UTIL	0.59	0.56	0.61	0.63	69.0	0.70	29.0	0.65	69.0	0.63	0.49	0.48	0.40	0.38	0.32	0.32
MEDVOL=475	ADJ	RESIS	26.0	35.0	33.7	34.7	33.2	32.8	34.0	35.5	33.7	35.5	36.6	38.8	45.5	43.3	45.2	46.7
	AD	FLOW	0.92	0.92	0.92	0.89	0.93	0.92	0.88	0.87	0.92	0.00	0.93	0.93	0.0	0.95	0.93	0.92
GROUP=No Topical	VRE-	SIST	23.8	32.0	30.8	31.8	30.4	30.0	31.1	32.5	30.8	32.5	33.5	35.5	41.6	39.6	41.4	45.8
GROUP=	LACT	DEXT	0.28	0.63	0.80	0.84	0.92	0.98	1.03	1.05	1.02	1.04	1.13	0.99	1.04	1.07	1.15	1.00
DOSETIME=10:30	DEXT	ROSV	0.775	0.808	0.774	0.731	0.713	0.714	0.699	0.708	0.713	0.725	0.821	0.868	0.915	0.919	0.925	0.933
DOSETIM	LACT	ATEV	0.126	0.249	0.341	0.387	0.437	0.474	0.498	0.501	0.492	0.465	0.386	0.329	0.287	0.272	0.254	0.235
FLAPWT=40.82	DEXT	ROSA	1.170	1.190	1.190	1.170	1.170	1.190	1.170	1.170	1.180	1.160	1.150	1.190	1.190	1.170	1.140	1.150
_	LACT	ATEA	0.016	0.008	0.008	0.020	0.018	900.0	0.012	0.018	0.017	0.011	0.015	0.009	0.002	0.004	200.0	0.019
PHASE=	MEAN	FLOW	1.01	1.00	1.01	0.98	1.02	9.0	0.97	96.0	1.0	0.9	1.02	1.02	0.99	1.04	1.02	1.01
DE=95-65-9-L	MED	TEMP	35.8	35.4	35.4	35.5	35.5	35.5	35.6	35.7	35.7	36.4	36.4	36.4	36.5	36.5	36.5	36.4
_	ВР	MEAN	54	32	31	31	31	30	30	31	31	32	34	36	41	41	45	43
ANIMAL/S	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4
	HUMI	DITY	43.9	45.1	44.5	44.1	44.0	43.6	43.7	43.8	43.7	43.1	42.7	43.1	45.6	45.8	45.5	45.7
DATE=09/07/95	AIR	TEMP	35.7	35.4	35.4	35.4	35.1	35.5	35.5	35.6	35.5	36.0	36.3	36.3	36.3	36.3	36.3	36.3
	REL-	T I ME	-0.97	-0.75	-0.50	-0.25	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50
FLAPN0=2560	ACTL	TIME	9:32	9:45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00
	TARG	TIME	9:30	9:45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	UNC CUM	3.61 3.74 3.85 3.96 4.11		ernc cum	0.01 0.05 0.05 0.05 0.05 1.14 1.62 2.15 2.25 2.25 2.25 3.12 3.26	GLUC 0.01 0.39
NCSU=Yes .	GLUC UTIL	0.27 0.25 0.22 0.22 0.30	NCSU=Yes -	GLUC	- se	0.86 0.72 0.79
MEDVOL=475	ADJ RESIS	45.5 41.6 40.0 40.3	DVOL=474	ADJ RESIS	90 50.3 48.4 91 44.4 91 44.0 88 40.8 84 49.7 91 41.6 92 50.1 91 40.7 92 40.3 93 42.7 93 42.7 93 38.8 94 40.7 95 37.0 97 40.7 98 38.8 98 40.7 99 37.6 90 37.6 91 40.7 91 39.4	41.3 39.7 39.3
	ADJ FLOW	0.90 0.94 0.91 0.92 0.89	al ME	ADJ	A	FLOW 0.94 0.92
GROUP=No Topical	VRE- SIST	41.6 38.0 38.4 36.6	GROUP=No Topical MEDVOL=474	VRE- SIST	0.13 45.9 0.69 44.3 0.69 44.3 0.79 40.2 0.90 37.3 1.00 37.3 1.00 37.3 0.00 0.91 37.2 0.91 37.2 0.91 33.2 0.00 1.02 33.0 0.91 33.2 0.00 0.91 33.2 0.00 0.91 33.2 0.00 0.91 33.2 0.00 0.92 35.4 0.00 3	38.2 36.7 36.4
GROUP	LACT	1.00 1.13 1.36 0.93	GROUP	LACT	0.13 0.39 0.69 0.79 0.90 1.03 1.03 1.03 1.13 1.12 1.03 1.10 1.09 0.98 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	0.27 0.62 0.71
DOSETIME=10:30	DEXT	0.972 0.993 0.979 1.010	DOSETIME=11:00	DEXT	0.819 0.836 0.917 0.888 0.885 0.985 0.947 0.922 0.947 1.030 1.050 1.040 1.050 1.040 1.050 1.050 1.040 1.050	0.726 0.775 0.766
	LACT	0.208 0.205 0.207 0.213 0.220	DOSETIN	LACT	0.054 0.819 0.114 0.836 0.162 0.917 0.217 0.888 0.244 0.866 0.265 0.885 0.267 0.901 0.267 0.901 0.125 0.922 0.168 0.947 0.162 1.010 0.131 1.030 0.127 1.040 0.127 1.040 0.127 1.040 0.127 1.040 0.127 1.040 0.127 1.040 0.121 1.050 0.122 1.040 0.122 1.040	ATEV 0.125 0.227 0.282
FLAPWT=40.82 continued)	DEXT	1.160 1.150 1.130 1.160	FLAPWT=25.44	DEXT	0.015 1.120 0.016 1.130 0.016 1.130 0.013 1.130 0.014 1.130 0.014 1.130 0.014 1.150 0.015 1.150 0.017 1.150 0.007 1.150	1.120 1.120 1.140
S	LACT	0.020 0.017 0.011 0.009		LACT	0.015 0.015 0.016 0.017 0.017 0.017 0.017 0.007 0.007 0.005 0.000	0.017 0.014 0.016
PHASE=1	MEAN	0.99 1.03 0.99 1.01	PHASE=1	MEAN	0.98 1.01 1.02 1.00 0.93 1.00 1.00 1.00 1.00 1.02 1.03 1.03 1.03 1.03 1.00 1.00 1.00 1.00	
IDE=95-65-9-L	MED	36.5 36.4 36.4 36.4	(DE=95-64-5-R	MED TEMP	7.4 45 36.4 7.4 41 36.9 7.4 45 37.1 7.4 40 37.1 7.4 42 37.1 7.4 42 37.1 7.4 48 37.2 7.4 38 37.3 7.4 37 37.3 7.4 37 37.3 7.4 34 37.3 7.4 34 37.3 7.4 34 37.3 7.4 34 37.3 7.4 34 37.3 7.4 34 37.3 7.4 34 37.3 7.4 34 37.3 7.5 36 37.6 ANIMAL/SIDE=95-64-5-L ART BP MED	37.1 37.8 38.0
'SIDE=9	BP	41 38 37 36		MEAN	45 41 40 40 40 40 40 40 40 40 40 40 40 40 40	39 36 36
ANIMAL/S	ART MEDPH	4.7.7 4.7.7 7.7.4 7.7.7	ANIMAL/S	ART MEDPH	7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4	7.4
26/20	HUMI	42.2 42.4 42.4 42.4	13/95	HUMI	4480-MOSP40000MM0464	41.5
DATE=09/07/95	AIR	36.3 36.4 36.4 36.4 36.4	DATE=09/13/95	AIR	37.2 40. 38.3 38.1 38.3 38.3 38.3 38.3 37.7 37.8 37.7 37.7	38.2 38.7 38.8
	REL- TIME	6.50 7.00 7.50 8.00		REL- TIME		-1.00
FLAPNO=2560	ACTL TIME	16:30 17:00 17:30 18:00	FLAPNO=2561	ACTL TIME	10:00 -1. 10:15 -0. 10:45 -0. 11:00 0. 11:00 0. 11:00 0. 12:00 1. 12:00 2. 14:00 3. 14:00 3. 15:00 4. 15:00 6. 17:00 6. 17:00 6. 18:00 7. 18:30 7. 18:30 7. 18:30 7. 18:30 7. 18:30 7. 18:30 7. 18:30 7.	9:30 9:45 10:00
	TARG	16:30 17:00 17:30 18:00	1	TARG	10:00 10:15 10:45 11:30 11:30 12:30 13:30 14:30 15:30 16:30 17:30 17:30 17:30 17:30 17:30 17:30 17:30 17:30	

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

8 6 8	CUM	GLUC	0.56	0.76	1.12	1.49	1.82	2.17	5.49	2.83	3.15	3.45	3.69	3.94	4.20	4.45	4.67	4.90	5.12	5.36	
NCSU=Yes	פרחכ	UTIL	0.74	0.73	0.74	0.73	99.0	0.71	0.63	69.0	0.64	0.53	0.54	65.0	0.53	0.49	0.45	0.47	0.44	25.0	
MEDVOL=480	ADJ	RESIS	39.3	39.3	38.1	41.1	40.2	40.7	43.7	45.0	44.3	43.7	44.5	45.6	43.5	40.5	47.2	45.5	48.1	43.5	
_	ADJ	FLOW	0.92	0.92	0.89	0.85	0.92	0.93	0.89	0.95	0.92	96.0	0.94	0.92	0.94	1.01	0.87	0.0	0.87	26.0	
GROUP=No Topica(VRE-	SIST	36.4	36.4	35.2	38.0	37.2	37.6	40.4	38.8	41.0	40.4	41.2	45.2	40.2	37.4	43.6	42.1	7.77	40.2	
GROUP=N	LACT	DEXT	0.89	0.94	1.02	26.0	1.10	1.02	1.09	96.0	0.93	1.08	1.05	1.03	0.97	1.1	1.06	0.97	0.95	0.95	
DOSETIME=10:30	DEXT	ROSV	0.782	0.785	0.774	0.781	0.809	0.814	0.834	0.836	0.852	0.881	0.892	0.919	606.0	0.930	0.928	0.925	0.923	0.922	
DOSETIM	LACT	ATEV	0.323	0.340	0.367	0.370	0.348	0.333	0.333	0.306	0.282	0.262	0.261	0.239	0.237	0.234	0.235	0.218	0.207	0.199	
FLAPWT=28.02 ontinued)	DEXT	ROSA	1.130	1.130	1.130	1.150	1.120	1.140	1.140	1.150	1.150	1.120	1.140	1.150	1.150	1.140	1.150	1.150	1.140	1.130	
۔ ي	LACT	ATEA	0.015	0.015	0.003	0.013	0.007	0.000	0.000	0.005	900.0	0.003	0.001	0.00	0.004	0.00	0.000	0.00	0.00	0.001	
PHASE=	MEAN	FLOW	0.99	0.99	26.0	0.92	1.00	1.01	26.0	1.03	1.00	1.04	1.02	1.00	1.02	1.10	0.94	0.98	0.95	1.05	
MAL/SIDE=95-64-5-L	MED	TEMP	37.6	37.4	37.3	37.3	37.4	36.9	36.8	36.8	36.8	36.8	36.8	36.8	36.9	37.4	37.1	37.0	37.0	37.1	
SIDE=99	æ	MEAN	36	36	34	35	37	38	36	70	41	45	75	75	41	41	41	41	75	75	
ANIMAL/	ART	MEDPH	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.5	7.4	7.4	7.4	7.5	
13/95	HUMI	DITY	40.4	40.4	39.7	40.1	39.9	40.1	40.2	40.2	40.3	40.3	40.6	41.0	40.5	39.2	40.5	41.0	41.2	41.3	
DATE=09/13/95	AIR	TEMP	38.5	38.4	38.2	38.3	38.3	38.4	37.9	37.8	37.7	37.8	37.8	37.8	38.0	38.3	38.1	38.0	38.1	38.1	
	REL-	TIME	-0.27	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	,
FLAPNO=2562	ACTL	TIME	10:14	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	
	TARG	TIME	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	

0.00 0.35 0.35 0.47 0.57 0.57 1.68 1.68 1.68 2.40 2.62 2.73 3.19 3.42 NCSU=Yes 0.75 0.76 0.60 0.77 0.45 0.45 0.45 0.45 0.45 0.45 GROUP=No Topical MEDVOL=509 62.5 51.5 51.5 50.1 47.0 50.1 43.4 43.4 43.4 43.4 42.9 42.9 ADJ RESIS 0.98 0.99 0.99 0.90 0.97 0.95 1.08 1.08 1.03 1.03 ADJ FLOW 0.16 0.36 0.35 0.55 0.93 0.93 0.94 0.99 0.99 0.99 0.99 LACT DOSETIME=11:00 0.848 0.923 0.972 0.972 0.974 0.944 0.944 0.956 0.956 0.957 0.967 0.967 0.057 0.117 0.1156 0.162 0.162 0.203 0.203 0.213 0.213 0.196 0.196 0.189 0.185 0.185 0.185 LACT FLAPWT=25.48 1.130 1.170 1.170 1.160 1.160 1.160 1.160 1.160 1.160 1.160 DEXT 0.007 0.004 0.019 0.017 0.017 0.013 0.013 0.010 0.010 0.000 0.000 0.000 LACT PHASE=1 1.00 1.04 1.04 1.05 0.98 0.98 0.98 0.98 1.02 1.03 1.03 0.95 0.95 0.95 MEAN ANIMAL/SIDE=95-3-16-R 34.2 34.1 34.1 34.1 33.0 33.0 33.0 34.6 34.6 34.6 34.6 34.6 34.6 34.6 MED BP MEAN ART Medph HUMI DATE=09/20/95 AIR TEMP -1.00 -0.73 -0.25 REL-TIME FLAPN0=2563 10:00 10:15 11:00 11:00 11:00 11:00 12:30 12:30 14:00 17:00 17:00 17:00 17:00 17:00 10:30 11:00 11:30 11:30 12:30 12:30 14:00 14:30 16:30 16:30 17:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

			,							:	
	CUM	3.61 3.84 4.08		OLUC RUM CUM	0.01 0.12 0.23	0.39 0.54 0.65 0.74	0.87 0.99 1.12	1.49	2.04 2.30 2.47	CUM SUP	0.01 0.17 0.31 0.47
NCSU=Yes	GLUC	0.37 0.46 0.50	NCSU=Yes	GLUC	1.24 0.60 0.42 0.30	0.35 0.29 0.23 0.17	0.26	0.32	0.27 0.19 0.32 0.33	NCSU=Yes GLUC	0.58 0.65 0.64 0.63
MEDVOL=509	ADJ RESIS	39.9 39.7 40.0	MEDVOL=487	ADJ RESIS	73.3 60.0 62.3	51.7 52.2 51.9 48.5	41.6 40.9 35.3	33.8 33.8 1.1	34.5 32.2 32.9	MEDVOL=486.9	50.4 45.0 50.6 50.0 54.3
	ADJ FLOW	1.10		ADJ	0.93	0.97 0.98 0.91	0.93	0.96 0.98 0.98	0.96 0.96 1.00		0.93 1.02 1.00 1.00
GROUP=No Topical	VRE- SIST	39.1 38.9 39.3	GROUP=No Topical	VRE- SIST					32.4 30.2 30.8	GROUP=No Topical LACT VRE-	47.2 47.2 47.5 46.9 51.0
GROUP=	LACT	1.25 0.88 0.87	GROUP	LACT	0.02 0.16 0.46		1.04		0.90 1.11 0.89 0.94	GROUP=N LACT	0.39 0.62 0.75 0.80 0.83
DOSETIME=11:00	DEXT	0.990	DOSETIME=10:45	DEXT	0.626 0.898 0.982	1.040	1.040	1.070 1.030 1.040 1.070	1.050 1.070 1.030 1.030	=10:15 DEXT	0.824 0.809 0.850 0.816 0.806
DOSETIM	LACT	0.183 0.160 0.181	DOSETIM	LACT	0.028 0.060 0.100	0.140	0.130 0.135 0.135	0.129 0.130 0.131 0.130	0.107 0.100 0.124 0.127	DOSETIME=10:15 LACT DEXT	0.133 0.209 0.246 0.281 0.293
FLAPWT=25.48 (continued)	DEXT	1.130 1.140 1.130	FLAPWT=24.92	DEXT	1.150	1.160	1.150	1.160 1.160 1.170 1.170	1.160 1.150 1.160	FLAPWT=32.28 LACT DEXT	1.140 1.130 1.140 1.140
FLAPW	LACT	0.008		LACT	0.019 0.020 0.018	0.020	0.005	0.017 0.007 0.002 0.003	0.008 0.011 0.008 0.005		0.010 0.010 0.022 0.021
PHASE=1	MEAN	1.13	PHASE=1	MEAN	0.95 1.00 0.98	1.03	0.98	1.02	1.02	PHASE=1	1.00
E=95-3-16-R	MED	34.6 34.6 34.6	DE=95-3-16-L	MED	33.9	33.6	34.1	34.2 34.2 34.2 34.2	34.1 34.1 34.1	ANIMAL/SIDE=95-3-12-L ART BP MED	33.3 33.5 33.9 33.9
1DE=95	BP MEAN	75 75 75	1DE=95	BP MEAN	55 57 57 57 57 57 57 57 57 57 57 57 57 5	22 22 23	3888	33333	33 11 33	IDE=95	47 47 50 50 52
ANIMAL/SID	ART Medph	7.4 7.7 7.4	ANIMAL/SI	ART MEDPH	7.7	4.7.7	4.7.7.7.2.4.2.4.	7.7.7. 7.4.4.4.	7.4	IMAL/S ART	4.7.7
	HUMI	47.7 47.6 47.7		HUMI	50.6	49.2 49.1	49.67	47.2 46.2 46.7 46.5	46.4 45.5 45.7	# 2	48.9 48.0 47.7 47.2 47.1
DATE=09/20/95	AIR	35.1 35.1 35.0	DATE=09/20/95	AIR	34.6	34.3	34.6	34.6 34.8 34.7 34.7	34.8 34.7 34.7	DATE=09/21/95	33.6 33.9 34.1 34.3
	REL- TIME	7.00 7.50 8.00		REL- TIME	-0.93	0.00	3.00	4.50 5.50 6.00	6.50 7.00 7.50 8.00		-1.00 -0.75 -0.50 -0.25
FLAPN0=2563	ACTL TIME	18:00 18:30 19:00	FLAPN0=2564	ACTL TIME	9:49 10:00 10:15	10:45 11:15 11:45	12:45 13:15 14:15	14:45 15:15 15:45 16:15	17:15 17:45 18:15 18:45	FLAPNO=2566 ACTL RE	9:15 9:30 9:45 10:00
1	TARG	18:00 18:30 19:00		TARG	9:45 10:00 10:15	11:15	13:15 13:45 14:15	14:45 15:15 15:45 16:15	17:15 17:45 18:15 18:45	TARG	9:15 9:30 9:45 10:00
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TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	SLUC CUM	0.96 1.23 1.53	2.02	2.26	2.93 3.17 3.43	3.63	4.27
NCSU=Yes	GLUC	0.66 0.55 0.59	0.48	0.48 0.42 0.49	0.44 0.47 0.51	0.42	0.44
MEDVOL=486.9	ADJ RESIS	52.3 57.1 72.1	67.4	65.7 63.4	59.7 59.5 53.0	53.6	52.3 53.0
MEDV	ADJ FLOW	0.99	0.93	0.95 0.93 0.91	0.94	0.93	0.96
GROUP=No Topical	VRE- SIST	49.1 53.5 67.7	63.2	60.1 61.6 59.5	56.0 55.8 49.8	52.6	49.0
GROUP=No	LACT	1.05	1.15	1.02 0.96 0.89	0.95	0.89	0.8 88 88 88
:=10:15	DEXT	0.795	0.831	0.856 0.873 0.841	0.875 0.831 0.848	0.888	0.896
DOSETIME=10:15	LACT	0.332 0.335 0.335	0.332	0.276 0.243 0.263	0.247	0.231	0.222
FLAPWT=32.28 (continued)	DEXT	1.130	1.100	 	1.110	1.120	1.130
FLAPW (cont in	LACT	0.024	0.023	0.018 0.025 0.024	0.023	0.024	0.021 0.035 0.035
PHASE=1	MEAN	1.06	1.00	1.02 0.99 0.98	0.90	1.00	1.02
AL/SIDE=95-3-12-L	MED	34.2	34.4 34.5	34.1 34.2 34.1	34.1	34.2	34.2
1DE=95	BP MEAN	52 53 67	61 63	61 58	25 25 25	50.5	20 64
ANIMAL/8	ART Medph	4.7.	7.5	7.5	7.4	7.4	7.4
	HUMI	49.2 49.1 48.5	48.4	47.3 47.0 46.8	46.9	47.2	47.3 48.1 47.7
DATE=09/21/95	AIR	34.0	34.7	34.6 34.6 34.6	34.6	34.6	34.7 34.7 34.7
	REL- TIME	1.00	2.50	3.50	2.00.00 00.00	6.50	7.50 7.50 8.00
FLAPN0=2566	ACTL	10:45 11:15 11:45	12:15 12:45	13:15 13:45 14:15	14:45 15:15	16:15	17:15 17:45 18:15
	TARG	10:45	12:15	13:15 13:45 14:15	15:15	16:15	17:15 17:45 18:15

0.58 0.66 0.34 0.37 0.37 0.28 0.25 0.21 0.27 0.21 0.27 0.33 MEDVOL=476 NCSU=Yes ADJ RESIS ADJ FLOW 0.84 0.93 0.93 0.92 0.92 0.92 0.93 0.90 0.91 0.93 0.93 0.93 DATE=09/27/95 ANIMAL/SIDE=95-11-6-R PHASE=2 FLAPWT=30.38 DOSETIME=11:01 GROUP=EtoH VRE-SIST 0.07 0.22 0.25 0.25 0.81 1.17 1.72 1.72 1.00 0.99 0.99 0.99 0.99 0.99 LACT 0.839 0.860 0.929 11.010 0.979 0.979 11.060 11.060 11.060 11.060 11.070 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 11.050 DEXT ROSV 0.046 0.089 0.089 0.092 0.140 0.143 0.152 0.154 0.144 0.144 0.154 0.154 0.154 LACT 1.160 1.170 1.170 1.170 1.170 1.170 1.150 1.150 1.150 1.150 DEXT 0.022 0.023 0.023 0.023 0.014 0.020 0.020 0.029 0.028 0.038 LACT MEAN BP MEAN ART Medph 44444444444444444 HUMI AIR TEMP --- FLAPNO=2567 -1.02 -0.77 -0.77 -0.27 REL-TIME 10:00 10:15 11:01 11:01 11:01 11:01 11:01 11:00 12:00 12:00 14:00 15:00 16:00 17:00 ACTL TIME 10:15 10:30 11:00 11:00 11:00 12:00 12:00 13:00 14:00 15:00 15:00 16:00 17:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

			:															
	GLUC	2.57		SLUC	0.01	0.18	0.83	1.48	2.16	2.80	3.09	3.60	4.1	4.39	4.85	1 1 1 1 1	CUM	0.01 0.23 0.44 0.63 0.80 1.07
NCSU=Yes	GLUC	0.30	NCSU=Yes	GLUC UT1L	0.04	0.26	0.62	9.0	0.70	0.63	0.58	0.50	0.51	0.56	0.46	NCSU=Yes	GLUC	1.22 0.88 0.82 0.77 0.73 0.53
	ADJ RESIS	43.0		ADJ RESIS	85.0 91.3 130.3	79.1	81.1	25.9	9.99	70.5	72.6	73.4	69.4	9.99	65.0	MEDVOL=524	ADJ RESIS	44.6 38.5 33.5 30.3 35.7 29.7
MEDVOL=476	ADJ FLOW	0.95	MEDVOL=474	ADJ FLOW	0.92	0.91	0.93	0.91	0.95	0.92	0.91 0.88	0.91	0.92	0.95	0.92	MEDVO	ADJ FLOW	1.08 1.14 1.12 1.07 0.92
GROUP=EtOH	VRE- SIST	39.4	GROUP=3 mg HD	VRE- SIST	77.6 83.4 119.0										59.4	GROUP=3 mg HD	VRE- SIST	45.1 38.9 33.8 30.6 30.3 36.1
O1 GROU	LACT	0.92	GROUP	LACT	0.40 1.30 0.75	0.72	9.0	26.0	0.93	0.93	0.94	96.0	0.91	0.81	0.96		LACT	0.04 0.20 0.36 0.45 0.55 0.89
FLAPUT=30.38 DOSETIME=11:01 :inued)	DEXT	0.993	DOSETIME=10:15	DEXT	1.120 1.130 0.891	1.006	0.793	0.780	0.785	0.814	0.827	0.871	0.875	0.877	0.882	DOSETIME=10:00	DEXT	0.490 0.685 0.745 0.784 0.823 0.823
18 DOSE1	LACT	0.168	DOSETIA	LACT ATEV	0.035	0.132	0.368	0.381	0.363	0.347	0.324	0.295	0.277	0.268	0.276	DOSETI	LACT	0.046 0.118 0.176 0.205 0.234 0.330
(PWT=30.3	DEXT	1.140	FLAPWT=32.47	DEXT	1.140	1.150	1.130	1.140	1.150	1.150	1.140	1.140	1.150	1.170	1.130	FLAPWT=34.97	DEXT	1.160 1.170 1.170 1.170 1.160
PHASE=2 FLAPWT (continued)	LACT	0.033	:2 FLAPI	LACT	0.027 0.026 0.026	0.028	0.037	0.038	0.024	0.024	0.031	0.036	0.028	0.031	0.038		LACT	0.020 0.024 0.021 0.022 0.022 0.029
	MEAN	1.04	PHASE=2	MEAN	1.01 1.06 0.84	0.90	2.05	88.8	. 6	3.5	1.00	1.00	.0.	1.04	1.01	PHASE=2	MEAN	1.07 1.13 1.11 1.06 0.92
SIDE=95-11-6-R	MED	37.6	ANIMAL/SIDE=95-6-7-R	MED	37.3 35.7 36.5	37.4	37.6 37.6	37.9	37.2	37.1	37.1 37.2	37.1	37.2	37.2	37.3	SIDE=95-6-7-L	MED	36.3 36.6 36.7 36.9 36.9 37.2
	BP MEAN	11	./SIDE=	BP MEAN	88 100	2 59	5 K 8	265	63	2 %	% %	29	3 2	£ 5	8		BP	37 37 37 30 30
ANIMAL/	ART MEDPH	7.4	ANIMA	ART	7.3	7.4	4.7	7.4	4.4	7.4	7.4	7.4	7.4	7.4	7.4	ANIMAL/	ART MEDPH	444444
DATE=09/27/95	HUM1 D1TY	37.8	/28/95	HUMI DITY	41.7 35.4 41.9	40.4	38.3	36.3	34.3	33.5	37.5 37.2	39.2	36.1	40.7	41.4	/28/95	HUMI	41.2 40.2 39.3 37.2 37.0
DATE=0	AIR	36.6	DATE=09/28/95	AIR	36.4 35.4 36.0	36.5	36.4 36.8	37.4	36.6	36.0	36.0 36.2	36.1	36.3	36.4	36.4	DATE=09/28/95	AIR	36.2 36.8 37.2 37.6 37.6 38.1
FLAPNO=2567	REL- TIME	7.98	FLAPNO=2569	REL- TIME	-1.00 -0.75 -0.50	0.00	1.00	2.00	8.00	4.00	5.00	5.50	6.50	7.00	8.00	FLAPNO=2570	REL- TIME	-1.00 -0.75 -0.55 -0.25 0.00 1.00
FLAP	ACTL TIME	19:00	FLAPN	ACTL TIME	9:15 9:30 9:45	10:00	10:45	12:15	13:15	14:15	14:45 15:15	15:45	16:45	17:15	18:15	FLAPN	ACTL TIME	9:00 9:15 9:30 9:45 10:30 11:00
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TARG	19:00		TARG	9:15 9:30 9:45	10:00 10:15	10:45	12:15	13:15	15:45	14:45	15:45	16:45	17:15	18:15		TARG	9:00 9:15 9:30 9:45 10:00 11:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	GLUC	2.28 2.28 3.27 2.88 3.27 4.28 4.36 4.36 4.36 4.36 4.36 4.36 4.36 4.36	76.7
NCSU=Yes	GLUC	0.62 0.68 0.68 0.68 0.64 0.64 0.75 0.38 0.38	0.38
MEDVOL=524	ADJ RESIS	27.9 28.7 29.2 29.2 34.0 34.0 37.2 37.5 37.5 37.5	37.2
MEDVC	ADJ FLOW	41.8000000000000000000000000000000000000	0.99
SROUP=3 mg HD	VRE- SIST	28.2 29.0 29.7 30.2 37.6 37.6 37.8 37.8 37.8 37.6	37.6
	LACT	1.10 0.98 0.97 0.97 0.95 1.08 1.03 0.98	1.01
DOSETIME=10:00	DEXT	0.817 0.791 0.767 0.774 0.795 0.851 0.887 0.920 0.934 0.935	0.944
_	LACT	0.384 0.404 0.415 0.411 0.381 0.328 0.275 0.275 0.263	0.245
FLAPWT=34.97 intinued)	DEXT	1.150 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170	1.170
ន	LACT	0.030 0.030 0.021 0.028 0.015 0.015 0.017 0.017 0.024	0.016
. PHASE=2	MEAN	20.000.000.000.000.000.000.000.000.000.	0.99
L/SIDE=95-6-7-1	MED	37.6 37.7 37.7 37.7 37.7 36.6 36.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6	36.6
AL/SIDE	BP	238883783833333333333333333333333333333	37
ANIMA	ART MEDPH	44444444444	7.4
DATE=09/28/95	HUMI	88888888888888888888888888888888888888	39.9
DATE=0	AIR	38.88.86.64.44.73.73.73.73.73.73.73.73.73.73.73.73.73.	37.5
FLAPNO=2570	REL- TIME	2.50 2.50 3.50 3.50 5.50 7.50 7.50 7.50 7.50 7.50 7.50 7	8.00
FLAP	ACTL TIME	11:30 12:00 13:00 14:30 15:00 15:30 16:30 17:30	18:00
	TARG	11:30 12:30 13:30 14:30 15:30 15:30 16:30 17:30 17:30	18:00

	CUM	פרחכ	0.01	0.18	0.37	0.57	0.75	1.10	1.48	1.86	2.24	2.59	2.92	3.21	3.52	3.85	4.09	4.33	4.58	4.83	5.06	5.28	5.49
NCSU=Yes	OLUC	UTIL	0.72	69.0	0.74	0.80	0.75	0.70	0.75	0.77	0.75	0.71	0.65	09-0	0.61	09.0	0.55	0.48	0.50	0.49	0.46	0.44	0.42
_	ADJ	RESIS	39.0	37.4	34.7	33.6	33.4	34.9	31.1	36.1	31.6	27.1	32.5	30.5	29.6	28.3	59.6	28.5	27.2	30.8	27.4	27.6	27.4
MEDVOL=474	ADJ	FLOW	0.92	0.91	0.92	0.92	0.93	0.92	0.93	0.91	0.92	0.92	0.92	0.92	0.91	0.92	0.91	0.91	0.92	0.91	0.91	0.00	0.91
GROUP=E tOH	VRE-	SIST	35.6	34.2	31.7	30.7	30.5	31.8	28.4	33.0	28.9	24.8	29.7	27.9	27.0	25.9	27.0	26.0	54.9	28.1	25.0	25.3	25.0
	LACT	DEXT	0.17	0.38	0.54	0.63	0.74	0.83	0.91	0.91	0.89	0.93	96.0	1.02	0.95	76.0	0.99	1.05	0.93	96.0	96.0	0.95	0.95
DOSETIME=10:30	DEXT	ROSV	0.625	0.641	0.643	0.626	0.624	0.655	0.641	0.624	0.638	0.673	0.698	0.713	0.734	0.739	0.772	0.809	0.793	0.827	0.823	0.819	0.831
	LACT	ATEV	0.111	0.216	0.300	0.381	0.430	0.453	0.500	0.521	0.507	0.489	0.462	0.465	0.445	0.429	0.415	0.393	0.354	0.357	0.338	0.328	0.320
FLAPWT=44.22	DEXT	ROSA	1.150	1.150	1.180	1.210	1.170	1.170	1.180	1.190	1.190	1.190	1.170	1.150	1.180	1.180	1.180	1.160	1.160	1.190	1.160	1.150	1.140
PHASE=2 FL	LACT	ATEA	0.022	0.021	0.011	0.011	0.024	0.024	0.00	0.008	0.015	0.008	0.008	0.020	0.021	0.015	0.010	0.025	0.012	0.00	0.015	0.015	0.026
	MEAN	FLOW	1.01	1.00	1.01	1.01	1.02	1.01	1.02	1.00	1.01	1.01	1.01	1.01	1.00	1.01	1.00	1.00	1.01	1.00	1.00	0.99	1.00
ANIMAL/SIDE=95-15-4-R	MED	TEMP	36.7	36.4	36.4	36.5	36.3	36.3	36.3	36.4	36.3	36.3	36,3	36.3	36.6	36.6	36.6	36.6	36.7	36.6	36.7	36.7	36.7
(AL/SIDI	86	MEAN	36	34	35	31	31	32	62	33	62	52	30	58	27	56	27	5 8	23	58	52	52	52
	ART	MEDPH	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
DATE=10/04/95	HUMI	DITY	41.8	41.6	41.1	40.1	40.5	39.7	39.7	39.8	39.9	40.0	39.1	39.4	39.5	38.7	39.4	38.5	38.7	38.8	38.7	38.7	38.3
DATE=	AIR	TEMP	36.3	36.4	36.6	36.7	36.7	36.7	36.7	36.7	36.6	36.6	36.6	36.6	36.9	37.0	37.0	37.0	37.1	37.1	37.1	37.1	37.1
FLAPNO=2571	REL-	TIME	-1.00	-0.75	-0.50	-0.25	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	9.00	6.50	7.00	7.50	8.00
FLAF	ACTL	TIME	9:30	9:42	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	TIME	9:30	6:45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	OLUC CUM CUM	0.20	0.80	2.05 2.45 2.83	4.6.4 4.00.4	4.61	5.33	2.66		OUN GLUC	0.01 0.16 0.31 0.34 0.57 0.57 1.21 1.40 1.80 2.25 2.25 2.51 2.51 2.54 2.54
NCSU=Yes	GLUC	0.40	0.76 0.86 0.79	0.90 0.81 0.76	0.80	0.58	0.33	0.31 0.31	20-163	GLUC	1.04 0.62 0.62 0.53 0.53 0.34 0.39 0.47 0.42 0.50
MEDVOL=540	ADJ RESIS	38.1 33.8	34.8 32.7 32.0	30.9 31.6 32.5	32.7	39.5	42.5			ADJ RESIS	52.0 55.8 49.4 45.3 45.3 45.3 37.4 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0
MEDVC	ADJ FLOW	1.05	7.0.0	20.1.05	27.7.5	25.25	55.25	1.04		ADJ FLOW	0.98 0.097 0.098 0.098 0.097 0.097 0.097 0.097 0.095
=3 mg HD	VRE- SIST	52.0 39.6 35.2	33.3	32.2.2.2.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.	35.2	41.0	45.8 44.2	44.2	אויים-אוע	VRE- SIST	50.3 54.0 47.8 43.6 43.6 43.6 43.6 34.0 34.0 33.3 33.3 33.5
GROUP=3	LACT	0.14	0.68	0.87	0.04	1.19	0.82	, 0,		LACT	0.07 0.28 0.66 0.66 0.05 0.07 0.03 0.03 0.03 0.03 0.03 0.03 0.03
DOSETIME=10:15	DEXT ROSV	0.898	0.719	0.635	0.693	0.835	0.959	196 0.950 0.	01 = 3W1 1:	DEXT ROSV	0.563 0.790 0.817 0.823 0.923 0.923 0.936 0.908 0.909 0.909 0.909
DOSETI	LACT	0.056 0.216 0.317	0.336 0.403 0.456	0.502	0.454 0.468 0.431	0.329	0.212	4.		LACT	0.057 0.131 0.191 0.227 0.270 0.266 0.248 0.268 0.268 0.268 0.268 0.268 0.268
FLAPWT=36.32	DEXT	1.140	1.180	1.180	1.180	1.180	1.160	1.140 0	APK1=57.	DEXT	1.210 1.160 1.140 1.150 1.150 1.150 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170
	LACT	0.022	0.024 0.010 0.024	0.015	0.012	0.013	0.009	0 0.024		LACT	0.013 0.022 0.015 0.024 0.025 0.018 0.025 0.019 0.026 0.026
. PHASE=2	MEAN	85.5	8688	3655	9.0.0		5666		ארן אין	MEAN	995.1.1.00.1.1.1.1.00.00.00.00.00.00.00.00.
L/SIDE=95-15-4-L	MED	37.6 35.9 36.3	36.4	36.6 36.6 36.6	36.6 36.6 36.6	36.7	36.6	44 36.6 44 36.6	- 43 - 13 - 1	MED	37.1 37.4 37.4 36.9 37.6 37.7 37.7 37.7 37.7
/SIDE=9	BP MEAN	25 35 35	3328	*****	***	37 41	: 64:	‡ 2	L/ 310E:	BP MEAN	50 50 50 50 50 50 50 50 50 50 50 50 50 5
ANIMAL,	ART MEDPH	4.7.4	4.7.7	32.25	 	12.2		7.4	ARIMA	ART Medph	7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7
	HUMI	41.2	38.5 37.7 37.4	37.1 36.6 36.6	36.2 36.6 36.7	36.6	34.3	38.1 37.0	64/11/0	HUMI	40.00 40
DATE=10/04/95	AIR	37.7 36.9 37.5	37.6 37.9 37.9	38.0 38.0 38.1	38.0 38.0 38.0	38.3	37.9 38.1	38.1	DAIE=10	AIR	37.7 38.1 38.1 38.1 38.1 38.5 38.5 38.5 38.6 38.6 38.6 38.8 38.8 38.8 38.8
	REL- TIME	-0.75	0.00	2.50	8.8.4 8.00.0	5.50	7.00	1:15 8.00	C/CZ=0	REL- TIME	-1.00 -0.75 -0.55 -0.25 -0.25 -0.50 -1.50
· FLAPNO=2572	ACTL TIME	9:15 9:30 9:45	10:00 10:15 10:45	11:15 11:45 12:15 12:45	13:15 13:45 14:15	15:15	17:15	18:15	FLAPS	ACTL	9:15 9:30 9:45 10:00 10:15 11:45 11:45 12:45 13:45 14:15 14:45 15:15
	TARG TIME	9:15 9:30 9:45	10:00 10:15	11:15 11:45 12:15 12:45	13:15 13:45 14:15	15:15	16:45 16:45 17:15	17:45 18:15	1	TARG	9:35 9:35 10:05 10:05 11:15 11:15 12:45 13:15 14:15 15:15 15:15 15:15 15:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

!			:		:		
: : : : :	CUM	3.07 3.29 3.52 3.74 3.98		CUM	0.01 0.20 0.38 0.52 0.52 0.64 1.15 1.42 1.64 1.87 2.28 2.28 2.28 2.48 2.48 2.75 2.90 3.32 3.32 3.35 3.59	GLUC	0.01 0.19 0.36
NCSU=Yes	GLUC	0.46 0.44 0.45 0.45 0.48	NCSU=Yes -	GLUC	0.81 0.75 0.75 0.55 0.56 0.48 0.44 0.45 0.26 0.28 0.28 0.29 0.27 0.29	GLUC	0.74 0.76 0.68
	ADJ RESIS	33.4 32.0 32.2 32.4	MEDVOL=494	ADJ RESIS	94 69.0 96 43.9 97 39.3 96 38.7 95 35.7 95 37.8 97 39.3 97 39.3 97 39.5 97 39.5 97 38.9 97 38.9 98 38.9 98 38.9 99 38.9	ADJ RESIS	29.8 31.6 28.9
MEDVOL=502	ADJ	0.96 0.97 0.97 0.96 0.96		ADJ FLOW	0.94 0.96 0.97 0.95 0.95 0.95 0.95 0.95 0.95 0.95	ADJ FLOW	1.01
GROUP=EtOH	VRE- SIST	32.3 32.0 31.0 31.2	GROUP=3 mg HD	VRE- SIST	23 41.8 47 37.4 47 37.4 558 36.8 37.8 34.0 91 33.0 92 35.0 92 37.4 97 36.5 97	VRE- SIST	30.3 32.1 29.4
	LACT	0.82 0.87 0.91 0.93		LACT		LACT	0.14
DOSETIME=10:15	DEXT	0.811 0.805 0.810 0.775 0.741	DOSETIME=9:58	DEXT	030 0.597 0.619 0.654 0.654 0.654 0.745 0.654 0.745 0.745 0.745 0.745 0.745 0.809 0.831 0.897 0.873 0.926 0.920 0.921 0.922 0.943 0.923 0.	DEXT	0.703 0.679 0.721
	LACT ATEV	0.261 0.269 0.282 0.287 0.297		LACT		LACT	0.096 0.200 0.272
PHASE=2 FLAPWT=37.19 (continued)	DEXT	1.100 1.080 1.090 1.050	FLAPWT=40.32	DEXT	7 1.150	DEXT	1.180 1.180 1.160
E=2 FLAPWT (continued)	LACT	0.025 0.030 0.028 0.030 0.038		LACT		LACT	0.028 0.031 0.030
	MEAN	1.00	L PHASE=2	MEAN	1.01 0.09 0.00 0.00 0.00 0.00 0.00 0.00	MEAN	0.99
ANIMAL/SIDE=95-19-11-R	MED	37.9 37.9 37.8 38.1	DE=95-19-11-L	MED	55 37.4 42 35.9 38 36.2 38 36.4 38 36.4 38 36.4 37 36.5 37 36.6 37 36.6 37 36.6 37 36.6 37 36.6 37 36.6 37 36.6 37 36.6 37 36.6 37 36.6 38 36.7 36.8 37 36.6 37 36.6 38 36.7 36.8 37 36.6 38 36.7 38 38 36.7 38 38 36.7 38	MED	36.2 36.4 36.4
L/SIDE=	BP	322 32 31 31 31 31		BP	65 47 47 47 47 47 47 47 47 47 47 47 47 47	BP MEAN	30 31 29
	ART MEDPH	7.4	ANIMAL/S	ART MEDPH	7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4	ART Medph	7.4
/11/95	HUMI	34.8 34.8 34.8 35.1	11/95	HUMI	44.1 43.3 42.6 42.1 40.6 40.7 40.7 40.7 40.1 39.0 38.2 38.2 38.2 37.7 37.7 37.7	HUMI DITY	56.6 54.3 52.1
DATE=10/11/95	AIR	38.5 38.9 39.0 38.8 39.1	DATE=10/11/95	AIR	35.2 44.1 35.0 43.3 35.3 42.6 35.6 40.6 35.6 40.7 35.9 40.7 35.9 40.7 35.9 40.7 35.0 38.8 36.0 38.8 36.0 38.8 36.1 38.2 36.1 37.7 36.1 37.7 36.1 37.7	AIR	35.3 35.6 35.8
FLAPNO=2573	REL- TIME	6.00 6.50 7.00 8.00		REL- TIME	L 0.1 L 0.1 C 10 10 10 10 10 10 10 10 10 10 10 10 10	REL- TIME	-0.92 -0.68 -0.43
FLAPN	ACTL TIME	16:15 16:45 17:15 17:45 18:15	- FLAPNO=2574	ACTL TIME	9:00 -0.29 9:15 -0.26 9:30 -0.46 9:45 -0.22 9:58 0.00 11:30 1.31 12:30 2.53 13:00 3.03 14:30 4.53 15:30 6.53 16:30 6.53 18:00 8.00	ACTL TIME	9:31 9:45 10:00
	TARG	16:15 16:45 17:15 17:45 18:15		TARG	9:15 9:15 9:15 9:15 11:30 11:30 12:30 12:30 13:30 14:30 15:30 17:30 17:30 17:30	TARG	9:30 9:45 10:00
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TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	S	GLUC	0.54	29.0	1.10	1.46	1.81	2.05	5.29	2.53	2.73	2.88	3.03	3.19	3.34	3.55	3.67	3.82	3.98	4.17
NCSU=Yes	GLUC	UTIL	0.74	0.70	0.76	0.72	69.0	67.0	0.48	0.48	0.39	0.31	0.30	0.31	0.31	0.35	0.31	0.30	0.32	0.38
MEDVOL=528	ADJ	RESIS	24.5	27.5	56.4	24.0	27.4	2.92	27.9	36.4	32.8	32.1	31.6	32.3	32.0	31.8	31.5	31.5	30.6	31.6
	ADJ	FLOW	1.02	1.02	1.02	1.00	1.02	0.99	1.00	1.02	1.01	1.03	1.01	1.02	1.03	1.04	1.05	1.05	1.08	1.04
P=3 mg HD	VRE-	SIST	54.9	28.0	26.9	54.4	27.9	26.7	28.4	37.0	33.3	32.7	32.2	32.8	32.5	32.4	32.0	32.0	31.1	32.2
:6 GROUP=3	LACT	DEXT	0.63	0.73	0.82	0.85	9.76	0.93	0.91	0.83	0.75	0.95	0.83	0.83	98.0	0.77	-0.55	0.94	0.85	99.0
DOSETIME=10:26	DEXT	ROSV	0.715	0.704	0.701	0.714	0.763	0.838	0.859	0.878	0.930	996.0	926.0	0.967	0.977	0.950	0.979	0.972	0.961	0.974
DOSET	LACT	ATEV	0.329	0.358	0.412	0.435	0.363	0.326	0.310	0.283	0.221	0.213	0.192	0.196	0.198	0.195	0.195	0.200	0.189	0.185
FLAPWT=38.13 tinued)	DEXT	ROSA	1.180	1.150	1.180	1.180	1.200	1.160	1.170	1.180	1.180	1.160	1.170	1.160	1.170	1.170	1.170	1.160	1.150	1.210
5	LACT	ATEA	0.034	0.032	0.020	0.039	0.029	0.028	0.027	0.031	0.033	0.029	0.031	0.035	0.032	0.025	0.300	0.024	0.029	0.030
R PHASE=2	MEAN	FLOW	1.01	9.1	1.01	0.99	1.01	0.98	0.99	1.00	0.99	1.01	1.00	1.01	1.02	1.02	1.03	1.03	1.06	1.03
ANIMAL/SIDE=95-19-13-R	æ	TEMP	36.2	36.1	36.1	35.9	35.6	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2
/SIDE=9	BP	MEAN	52	28	27	54	58	56	28	37	33	33	32	33	33	33	33	33	33	33
ANIMAL/	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5
12/95	HUMI	DITY	51.8	51.9	52.1	52.4	51.9	51.0	51.4	50.1	48.2	49.3	49.5	48.8	49.0	49.1	49.5	48.3	49.1	49.3
DATE=10/12/95	AIR	TEMP	36.1	36.1	36.1	36.0	36.1	36.2	36.1	36.2	36.2	36.3	36.3	36.3	36.3	36.3	36.3	36.3	36.3	36.3
FLAPNO=2575	REL.	TIME	-0.18	0.00	0.57	1.07	1.57	2.07	2.57	3.07	3.57	4.07	4.57	5.07	5.57	6.07	6.57	7.07	7.57	8.07
- FLAPN	ACTL	11ME	10:15	10:26	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	TIME	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

0.01 0.20 0.37 0.53 0.53 1.36 1.36 1.36 1.36 2.31 2.31 2.37 4.26 4.26 4.26 4.26 0.78 0.78 0.65 0.65 0.65 0.65 0.63 0.63 0.63 0.63 0.63 0.63 MEDVOL=511 NCSU=Yes ADJ RESIS ADJ FLOW ANIMAL/SIDE=95-19-13-L PHASE=2 FLAPWT=32.01 DOSETIME=10:43 GROUP=EtOH 39.8 36.3 31.2 33.2 33.3 30.0 30.7 30.7 31.8 33.3 33.3 35.6 36.7 36.7 36.7 36.7 0.17 0.39 0.61 0.61 0.82 0.83 0.84 0.83 0.83 0.83 0.83 0.83 0.718 0.713 0.753 0.753 0.779 DEXT ROSV 0.101 0.188 0.246 0.287 0.287 0.342 0.342 0.348 0.350 0.350 0.351 0.251 0.221 0.221 1.150 1.110 1.120 1.120 1.150 1.150 1.160 1.160 1.160 1.160 0.029 0.029 0.030 0.035 0.035 0.037 0.037 0.045 0.045 0.038 0.038 MEAN BP ART MEDPH DATE=10/12/95 AIR -0.97 -0.072 -0.072 -0.073 -0. FLAPN0=2576 REL-TIME 9:45 10:00 10:30 11:43 11:45 12:45 14:45 1 ACTL TIME 9:45 10:00 10:50 11:45 11:45 12:45 13:45 14:45 1

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

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) 	CUM	4.70 4.89 5.04		SUNG	0.01	0.52	5.1. 5.4. 1.9.	2.27	3.15	3.54	3.89	4.11	4.39		CUM	0.01 0.23 0.37 0.49 0.63
NCSU=Yes	GLUC	0.50 0.38 0.30	NCSU=Yes	GLUC UTIL	1.00	0.77	0.77	0.72	0.52	0.32	0.34	0.19	0.27	NCSU=Yes	GLUC	0.79 0.89 0.51 0.51
	ADJ RESIS	37.1 37.9 37.1		ADJ RESIS	36.9	36.3	38.7 37.9	40.7	46.8	46.6	46.6 62.6	55.4	51.4	MEDVOL=509	ADJ RESIS	50.2 69.0 50.5 42.4 37.5
MEDVOL=511	ADJ FLOW	0.97 0.95 0.97	MEDVOL=515	ADJ FLOW	0.9	0.98	9.0	1.00	8.8	0.99	0.99	0.90	1.00		ADJ FLOW	0.98 0.97 0.99 0.99
GROUP=EtOH	VRE- SIST	36.5 37.3 36.5	GROUP=E tOH	VRE- SIST	36.6	43.0 36.0	35.2 38.4 37.6	40.4	7 4 4 7 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	46.2	46.2	54.9	51.0 48.8	GROUP=3 mg HD	VRE- SIST	49.2 67.7 49.5 41.6 36.8
	LACT	0.74 0.85 1.03		LACT	0.33	0.88	0.9	0.97	0.98	1.18	0.95	1.25	0.90		LACT	0.09 0.26 0.47 0.61 0.75
DOSETIME=10:43	DEXT	0.898 0.929 0.929	DOSETIME=10:30	DEXT	0.800	0.761	0.728	0.784	0.858	0.967	0.960	0.996	0.992	DOSETIME=10:15	DEXT ROSV	0.751 0.721 0.931 0.910 0.845
	LACT	0.236 0.221 0.220		LACT	0.184	0.334	0.378	0.363	0.297	0.227	0.195	0.164	0.163		LACT	0.057 0.141 0.139 0.175
FLAPWT=32.01 tinued)	DEXT	1.170 1.140 1.090	FLAPWT=30.2	DEXT	1.150	1.150	1.150	1.150	1.130	1.130	1.130	1.10	1.130	FLAPWT=30.76	DEXT ROSA	1.160 1.180 1.190 1.170
PHASE=2 FLAPWT (continued)	LACT	0.036 0.041 0.054	PHASE=2 F	LACT	0.020	0.024	0.025 0.023 0.028	0.029	0.035	0.035	0.034	0.034	0.039		LACT	0.022 0.022 0.017 0.016 0.022
	MEAN	0.99		MEAN	1.00	. 6.6	0.9	1.01	0.9	8.8	0.81	1.08	1.00	-L PHASE=2	MEAN	1.01
ANIMAL/SIDE=95-19-13-L	MED	38.8 38.7 38.2	SIDE=95-19-12-R	MED	36.8	33.33	36.1 36.3 36.1	35.9	36.1	36.1	36.1 36.1	36.9	37.2 37.1	.DE=95-19-12-L	MED	37.9 33.6 35.6 37.1
-/SIDE=	BP MEAN	36 36 36	NL/SIDE	BP	37	34 7 4	3 88 88	5 45	44 40 40 41	9 9	46 50	5.0	51		BP	49 67 50 37
ANIMAL	ART MEDPH	7.4	ANIMAL/	ART MEDPH	7.5	7.7	4.7.	7.4	4.4.4	7.3	7.4	7.4	7.4	ANIMAL/S	ART MEDPH	7.3
/12/95	HUMI	35.4 35.1 35.8	DATE=10/18/95	HUMI	50.6	48.3	48.7	47.3	46.5	47.8	47.0	45.2	43.1	18/95	HUMI	37.9 25.7 39.4 37.5 36.6
DATE=10/12/95	AIR	35.2 39.7 39.4	DATE=1	AIR	36.4	36.6	36.9 36.9 36.8	36.6	36.6 36.7 7	36.8	36.9	37.5	38.1 38.1	DATE=10/18/95	AIR	37.6 35.5 36.7 37.6 37.4
FLAPN0=2576	REL- TIME	7.03 7.53 8.03	- FLAPNO=2577	REL- TIME	-1.00	0.00	1.50	2.50	3.50	5.00	5.50	6.50	7.50 8.00	FLAPN0=2578 [REL- TIME	-1.00 -0.75 -0.48 -0.25 0.00
FLAPN	ACTL TIME	17:45 18:15 18:45	FLAP	ACTL	9:30	10:14	11:30	12:30	15:50 14:00 14:30	15:00	16:00	17:00	18:00 18:30	- FLAPNO	ACTL TIME	9:15 9:30 9:46 10:00
	TARG	17:45 18:15 18:45	8 1 1 4 1 8 8	TARG	9:30	10:15	11:00 11:30 12:00	12:30	15:50 14:00 14:30	15:30	16:00	17:00	18:00 18:30		TARG	9:15 9:30 9:45 10:00 10:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	CUM	0.93 1.20 1.20 2.10 2.29 2.29 2.29 3.21 3.23 3.31 3.54 3.54		CUM	0.01 0.36 0.52 0.53 0.68 1.39 1.39 1.39 1.39 1.39 1.40 1.68 1.68 1.68 1.68
NCSU=Yes	GLUC	0.60 0.54 0.55 0.45 0.38 0.31 0.22 0.22 0.25	NCSU=Yes	GLUC	0.87 0.64 0.68 0.68 0.68 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75
MEDVOL=509	ADJ RESIS	34.2 37.2 37.2 37.2 31.6 31.6 31.1 31.6 32.7 32.7 32.7 32.7 32.7 32.7 32.7 32.7	MEDVOL=494	ADJ RESIS	45.5 40.6 37.3 34.2 34.1 46.1 46.1 46.1 46.1 46.1 46.1 38.9 36.9
	ADJ FLOW	0.97 0.98 0.98 0.98 0.98 0.99 0.99 0.98 0.98		ADJ FLOW	0.99 0.09
GROUP=3 mg HD	VRE- SIST	35.5 37.0 37.0 37.0 37.0 37.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 2	GROUP=3 mg HD	VRE- SIST	43.3 33.5 32.5 32.5 33.5 42.5 42.5 42.5 43.9 33.0 33.0
	LACT	0.82 1.02 1.02 1.02 1.03 0.93 0.83 0.93 0.94 0.94 0.85		LACT	0.17 0.58 0.75 0.75 0.09 0.95 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98
DOSETIME=10:15	DEXT ROSV	0.847 0.875 0.875 0.914 0.925 0.958 0.972 1.000 1.010 1.010	DOSETIME=10:45	DEXT	0.786 0.836 0.838 0.838 0.843 0.792 0.792 0.812 0.812 0.913 0.913 0.913 0.913
	LACT	0.281 0.282 0.278 0.273 0.264 0.201 0.205 0.170 0.169 0.149 0.143		LACT	0.095 0.154 0.203 0.273 0.313 0.385 0.385 0.385 0.284 0.264 0.267 0.267 0.252
FLAPWT=30.76 ntinued)	DEXT	1.160 1.150 1.150 1.150 1.150 1.170 1.170 1.120 1.130 1.130	FLAPWT=26.91	DEXT	1.170 1.170 1.120 1.140 1.140 1.140 1.140 1.150 1.150 1.110 1.110 1.110
PHASE=2 FLAPWT= (continued)	LACT	0.023 0.027 0.018 0.025 0.025 0.026 0.028 0.028 0.028 0.038 0.038		LACT	0.031 0.032 0.033 0.037 0.040 0.044 0.043 0.043 0.044 0.043 0.043 0.043 0.043 0.043 0.043 0.059 0.060
	MEAN	0.99 0.97 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.99	R PHASE=2	MEAN	1.00 1.02 1.02 1.03 1.03 1.03 1.03 1.00 1.03 1.00 1.03 1.00 1.03 1.03
IMAL/SIDE=95-19-12-L	MED	37.2 37.3 37.2 37.2 37.2 37.2 37.4 37.4 37.4 37.4 37.4 37.4 37.4 37.4	IMAL/SIDE=95-21-5-	MED	36.2 36.2 36.2 36.2 36.2 36.3 36.3 36.3
-/S10E=	MEAN	28 28 28 28 28 28 28 28 28 28 28 28 28 2	-/SIDE=	BP	33 33 33 33 33 33 33 33 33 33 33 33 33
ANIMAL	ART MEDPH	4444444444444	ANIMA	ART Medph	44444444444444444
18/95	HUMI	35.2 35.5 35.6 35.6 35.6 35.6 35.6 35.6 35.6	19/95	HUMI	40.0 38.2 39.0 38.7 38.7 38.7 38.7 37.6 37.6 37.6 37.6 37.6 37.6 37.6 37
DATE=10/18/95	AIR	37.7. 37.7. 37.7. 37.7. 37.7. 37.6. 37.6. 37.9. 37.9. 38.2. 38.2. 38.2. 38.3. 38.3.	DATE=10/19/95	AIR	37.1 37.7 37.7 37.7 37.7 37.7 37.7 37.7
FLAPNO=2578	REL- TIME	0.1.00 2.1.50 3.00 3.50 5.50 6.50 6.50 6.50 6.50 6.50 6.50 6	FLAPNO=2579	REL- TIME	-1.00 -0.75 -0.55
· FLAPN	ACTL TIME	10:45 11:15 11:15 12:15 13:15 13:15 14:15 14:15 16:15 17:15 17:15 17:15	- FLAPN	ACTL TIME	9:45 10:10 10:15 10:45 11:45 11:45 14:45 14:45 14:45 14:45 14:45 16:45 16:45 16:45 16:45 16:45
	TARG	10:45 11:45 11:45 12:45 13:15 14:45 14:45 16:45 16:45 17:15		TARG	9,45 10,00 1

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

;			1												;		
	OLUC CUM	5.12		CUM	0.01	0.63	1.25	1.81	2.28	2.66	3.04	3.40	3.74	4.08		CUM	0.01 0.15 0.26 0.36 0.44 0.65
NCSU=Yes	GLUC UT I L	0.45	NCSU=Yes	GLUC	0.99	0.55	0.59	0.54	0.41	0.43	0.40	0.34	0.36	0.33	NCSU=Yes	GLUC	0.45 0.55 0.46 0.39 0.41 0.41
MEDVOL=494	ADJ RESIS	35.7		ADJ RESIS	56.2 47.9 46.4	45.0	39.5	46.7	45.4	45.7	39.1	37.1	35.9	35.1	MEDVOL=512	ADJ RESIS	48.1 45.5 44.4 44.6 44.0 37.9 37.9
MEDVO	ADJ FLOW	0.95	MEDVOL=520	ADJ FLOW	1.00	1.00	66.0	1.00	1.01	1.01	1.00	8.5	9.5	1.00		ADJ FLOW	0.98 0.99 0.99 0.98 0.98
GROUP=3 mg HD	VRE- SIST	34.0	GROUP=EtOH	VRE- SIST	56.3 48.0 46.5	45.1	39.6	46.8	45.5	45.8	39.2	37.2	36.0	35.2	GROUP=3 mg HD	VRE- SIST	47.5 44.9 43.8 43.4 37.4 36.9
	LACT	0.94		LACT	0.10	0.67	0.92	0.93	0.99	0.96	0.84	0.93	0.86	0.93		LACT	0.09 0.29 0.48 0.65 0.84 0.92
DOSETIME=10:45	DEXT	006.0	DOSETIME=10:28	DEXT	0.674 0.792 0.844	0.855	0.844	0.875	0.928	0.942	0.934	0.953	0.950	0.949	DOSETIME=10:29	DEXT	0.908 0.888 0.946 0.978 0.957 0.957
	LACT	0.258		LACT	0.073 0.136 0.183	0.253	0.298	0.279	0.233	0.236	0.203	0.203	0.203	0.205		LACT	0.040 0.096 0.126 0.142 0.168 0.204
PHASE=2 FLAPWT=26.91 (continued)	DEXT	1.100	FLAPWT=29.44	DEXT	1.160	1.140	1.140	1.140	1.130	1.150	1.130	1.120	1.130	1.110	FLAPWT=28.07	DEXT	1.120 1.150 1.160 1.160 1.150 1.150
2 FLAPWT=2 (continued)	LACT	0.069	PHASE=2 FL	LACT	0.023	0.031	0.025	0.033	0.033	0.036	0.038	0.048	0.050	0.055		LACT	0.020 0.021 0.023 0.023 0.025 0.027
	MEAN	1.00		MEAN	1.00	1.00	. 6.6	1.00	1.01	1.0	9.5	8.8	86.5	1.00	PHASE=2	MEAN	0.98 1.01 1.00 0.99 0.99
DE=95-21-5-R	MED	37.8	SIDE=95-21-5-L	MED	36.8 36.6 36.3	36.9	36.8	36.7	36.6 36.6	36.7	36.6	36.7	37.5	37.4	ANIMAL/SIDE=95-22-5-R	MED TEMP	34.4 35.2 35.2 35.2 35.7
	BP	34		BP MEAN	48 48 49 49	42 5	6 8 8	47	45 44	94	39	37	2 2 2	35	/SIDE=	BP MEAN	337 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
ANIMAL/SI	ART MEDPH	4.7	ANIMAL/	ART Medph	4.7	7.7	7.3	7.7	7.4	7.4	7.3	7.4	7.4	7.4	ANIMAL	ART MEDPH	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.
	HUMI	35.2	DATE=10/19/95	HUMI	52.5 53.0 51.0	50.7	49.7	44.5	43.5	41.8	41.5	42.5	39.4	38.9	725/95	HUMI	37.2 34.8 33.9 34.4 32.9 32.9
DATE=10/19/95	AIR	38.9		AIR TEMP	36.1 36.3 36.2	36.6	36.7	36.5	36.5	36.5	36.5	36.5	37.5	37.6	DATE=10/25/95	AIR	35.0 36.0 36.3 36.3 36.3 36.8 36.8
	REL- TIME	8.00	FLAPNO=2580	REL- TIME	-0.95	0.00	1.03	2.03	3.03	4.03	5.03	6.03	7.03	8.03	FLAPN0=2581	REL- TIME	-0.98 -0.73 -0.23 -0.00 0.52
- FLAPNO=2579	ACTL	18:45	··· FLAP	ACTL	9:31 9:45 10:00	10:15	11:30	12:30	13:30	14:30	15:30	16:30	17:30	18:30	- FLAPNO	ACT.L TIME	9:30 9:45 10:00 10:15 10:29 11:30
	TARG	18:45		TARG	9:30 9:45 10:00	10:15	11:30	12:30	13:30	14:30	15:30	16:30	17:30	18:30	1 1 1 1 1	TARG	9:30 9:45 10:00 10:15 11:00 11:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	פרחכ מחש	1.07					_	_		_		_		_
NCSU=Yes	GLUC	0.42	0.34	0.13	0.31	0.32	0.36	0.30	0.33	0.38	0.32	0.35	0.37	0.30
MEDVOL=512	ADJ RESIS	36.1	40.1	43.8	43.0	46.1	9.44	45.1	44.8	43.9	44.2	46.2	45.9	41.5
_	ADJ FLOW	1.00	76.0	0.98	0.98	0.98	0.99	0.98	0.98	1.00	1.00	1.00	1.00	1.01
P=3 mg HD	VRE- SIST	35.6	39.6	43.2	45.4	45.5	44.0	44.4	7.47	43.3	43.6	45.5	45.4	41.0
GROUP=3	LACT	1.04	1.17	2.75	1.15	1.07	0.95	1.19	1.08	0.9	-0.88	1.06	0.89	1.20
DOSETIME=10:29	DEXT	0.946	0.969	0.967	0.975	0.978	0.962	0.977	0.955	0.955	0.981	0.960	0.939	0.962
DOSET	LACT	0.232	0.222	0.207	0.201	0.199	0.196	0.208	0.204	0.208	0.209	0.205	0.189	0.202
FLAPWT=28.07 ontinued)	DEXT	1.140	1.130	1.030	1.120	1.130	1.130	1.120	1.110	1.130	1.130	1.120	1.110	1.100
ິວ	LACT	0.031	0.034	0.034	0.034	0.037	0.037	0.038	0.037	0.034	0.340	0.035	0.037	0.037
R PHASE=2	MEAN	1.01	0.99	1.00	0.99	0.99	1.00	0.99	1.00	1.02	1.01	1.01	1.02	1.03
NIMAL/SIDE=95-22-5-R	MED	35.9	36.0	36.0	35.9	35.9	35.9	35.7	35.9	35.8	35.9	35.9	35.8	36.0
-/SIDE=	BP	38	36	43	45	45	77	77	77	77	77	97	43	45
ANIMAL	ART Medph	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.3	7.4
/25/95	HUM1 DITY	33.6	32.2	31.5	29.4	31.3	31.3	31.2	31.8	32.0	32.0	31.7	30.9	32.0
DATE=10/25/95	AIR	37.1	37.0	36.9	37.0	37.0	37.1	37.0	37.0	37.0	37.0	37.1	37.0	37.2
FLAPNÖ=2581 [REL- TIME	1.52	2.52	3.02	3.52	4.02	4.52	5.02	5.52	6.02	6.52	7.02	7.52	8.02
. FLAPN	ACTL TIME	12:00	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
1	TARG	12:00	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

	W C C	3	0.01	0.11	0.23	0.36	0.48	0.81	1.09	1.37	1.66	1.90	5.04	2.14	2.23	2.34	2.41	2.50	2.57	2.67	2.75	2.85	5.96
NCSU=Yes	GLUC	1110	0.48	0.40	0.48	0.52	0.55	0.62	0.56	0.57	0.58	0.47	0.28	0.20	0.18	0.21	0.15	0.18	0.13	0.21	0.17	0.19	0.23
-=505	ADJ	KESIS	60.3	59.9	57.3	24.7	49.6	49.0	48.0	48.5	8.67	54.0	9.95	61.2	58.1	56.2	57.8	56.1	55.2	53.9	52.9	51.9	51.6
MEDVOL=505	AD	101	0.98	0.97	0.98	0.97	0.99	96.0	96.0	0.97	96.0	96.0	0.95	96.0	96.0	0.98	0.97	96.0	0.98	0.98	0.98	0.98	0.99
GROUP=EtOH	VRE-	Sist	58.7	58.3	22.4	53.3	48.3	1.7.7	46.7	47.2	48.5	52.5	55.1	29.6	9.95	24.7	56.3	54.5	53.7	52.5	51.5	50.5	50.2
	LACT	DEXT	0.08	0.28	0.54	99.0	0.78	0.83	0.95	1.05	1.01	0.93	1.29	1.18	1.13	0.95	1.23	0.99	1.30	0.80	0.98	0.94	0.78
DOSETIME=10:13	DEXT	ROSV	0.900	0.942	0.902	0.867	0.869	0.823	0.853	0.841	0.826	0.892	0.994	1.030	1.030	1.030	1.060	1.040	1.060	1.030	1.040	1.030	1.010
	LACT	ATEV	0.041	0.082	0.162	0.211	0.249	0.305	0.317	0.351	0.344	0.269	0.230	0.159	0.142	0.136	0.129	0.132	0.124	0.121	0.122	0.128	0.128
FLAPWT=32.35	DEXT	ROSA	1.160	1.160	1.160	1.150	1.160	1.160	1.160	1.150	1.140	1.150	1.150	1.140	1.130	1.140	1.140	1.140	1.130	1.140	1.130	1.130	1.130
PHASE=2 FL	LACT	ATEA	0.021	0.021	0.022	0.023	0.023	0.025	0.026	0.027	0.027	0.029	0.028	0.029	0.029	0.031	0.031	0.033	0.033	0.033	0.034	0.034	0.034
	MEAN	FLOW	1.01	1.00	1.01	1.00	1.02	0.99	0.99	1.00	0.0	0.99	0.98	0.99	0.99	1.01	1.00	0.99	1.01	1.01	1.01	1.01	1.02
IMAL/SIDE=95-22-5-L	MED	TEMP	36.1	36.1	36.4	36.5	36.5	36.5	36.6	36.7	36.7	36.7	36.7	36.7	36.8	36.8	36.8	36.8	36.8	36.9	36.8	36.8	36.8
AAL/SID	86	MEAN	29	28	26	53	67	25	94	47	84	25	24	26	26	22	26	24	54	53	25	51	51
A	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
DATE=10/25/95	HUMI	DITY	39.2	39.7	38.0	36.8	36.9	37.0	37.1	36.6	36.2	35.4	36.4	36.5	36.8	34.6	36.7	35.0	35.4	34.9	33.9	34.1	33.2
DATE=1	AIR	TEMP	35.4	35.2	35.5	35.6	35.6	35.6	35.8	36.0	36.1	36.0	36.0	36.0	36.8	36.3	36.3	36.4	36.3	36.3	36.3	36.3	36.4
- FLAPNO=2582	REL-	TIME	-0.97	-0.72	-0.47	-0.22	0.00	0.53	1.03	1.53	2.03	2.53	3.03	3.53	4.03	4.53	5.03	5.53	6.03	6.53	7.03	7.53	8.03
FLAF	ACTL	TIME T	9:15	9:30	9:45	10:00	10:13	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15
	TARG	TIME	9:15	9:30	9:45	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	2019 MO2	0.01 0.13 0.25 0.36 0.47	1.97 1.97 2.29 2.58 2.85	3.55 3.58 3.58 3.78 4.20 4.41	CUM GLUC 0.01 0.026 0.03
NCSU=Yes	GLUC	0.87 0.50 0.45 0.46 0.52	0.56 0.66 0.66 0.57	0.51 0.46 0.47 0.43 0.43 0.42 0.47	0.96 0.55 0.55 0.56 0.57 0.56 0.57 0.56 0.38 0.38
MEDVOL=504	ADJ RESIS	27.8 27.8 25.5	26.3 26.3 27.7 32.4 34.5	.97 35.0 .97 36.3 .99 34.5 .99 33.5 .97 33.0 .97 33.1	ADJ RESIS 58.2 36.3 31.6 29.0 29.2 29.2 30.6 31.7 35.1 37.3 37.3 38.4
MEDVC	ADJ FLOW	0.98 0.98 0.98 0.97 0.98	0.98 0.98 0.98 0.98	0.97 0.99 0.99 0.97 0.97	ADJ 10.98 0.98 0.96 0.95 0.95 0.98 0.98 0.98 0.98 0.98
=3 mg HD	VRE- SIST	41.2 30.7 29.3 27.7 27.0 24.8	26.0 26.0 33.5 33.5 33.5	.97 54.0 .01 34.2 .99 33.5 .12 32.5 .98 32.0 .01 32.2 .91 30.5 .GROUP=3 mg HD	VRE- SIST 56.4 33.5 33.5 33.5 28.7 28.7 29.7 29.7 29.7 34.0 34.0 35.2 36.2 37.8
GROUP=3	LACT	0.01 0.27 0.80 0.87 0.98	0.98 0.98 0.98 0.98	0-00-0-0	LACT DEXT 0.04 0.055 0.091 0.092 1.00 1.00 1.10 1.11 1.11
DOSETIME=10:14	DEXT	0.579 0.828 0.882 0.871 0.856	0.757 0.757 0.722 0.739 0.765	350 0.806 334 0.835 320 0.830 325 0.849 308 0.851 309 0.851 311 0.813	DEXT ROSV 0.632 0.842 0.895 0.833 0.815 0.815 0.815 0.817 0.817 0.918
DOSETI	LACT	0.036 0.110 0.186 0.249 0.284	0.586 0.410 0.432 0.433 0.420 0.362		LACT ATEV 0.046 0.103 0.164 0.245 0.345 0.345 0.357 0.357 0.357 0.352 0.352 0.262 0.262
FLAPWT=35.69	DEXT	1.100 1.120 1.140 1.140	1.120	6 1.110 6 1.100 6 1.090 7 1.090 9 1.090	DEXT ROSA 1.150 1.140 1.120 1.120 1.120 1.120 1.120 1.120 1.110 1.110
	LACT	0.029 0.030 0.033 0.033 0.037	0.046 0.051 0.052 0.054 0.055	ប្តីស្តីស្តីស្តីស្តីស្តី	LACT ATEA 0.026 0.034 0.034 0.044 0.044 0.050 0.050 0.050 0.053
PHASE=2	MEAN	85.60.00	1.00	1.00 0.0 0.97 0.0 1.02 0.0 1.02 0.0 1.00 0.0 1.02 0.0	FLOAN 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
/SIDE=95-23-4-R	MED	37.1 36.6 36.6 37.1 37.1	36.8 37.3 37.0 37.2 37.0	4 54 57.1 4 34 37.2 4 34 37.2 4 33 37.4 4 32 37.7 4 32 37.5 4 31 37.5 IMAL/SIDE=95-23-4	MED 36.0 36.2 36.6 36.6 36.6 36.8 36.8 36.8 36.8 36.8
/SIDE=9	BP MEAN	12 5 8 5 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	£ £ £ 6 6 8 8 8 8	34 34 34 35 32 32 31 1/SIDE	MEAN MEAN 35 35 35 28 28 28 28 29 33 31 31 35 35 35 35 35 35 35 35 35 35 35 35 35
ANIMAL,	ART MEDPH	444444	4444444	7.4 7.4 7.4 7.4 7.4 7.4	MEDPH 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4
26/92	HUM1 D1TY	37.1 37.4 37.4 32.2 33.0	32.9 32.8 32.3 31.9 31.9	31.8 32.7 32.1 32.1 32.9 32.0 32.7	HUMI 38.8 37.5 37.2 36.1 35.0 35.0 35.0 35.0 35.0 35.0 35.0 35.0
DATE=10/26/95	AIR	37.0 37.1 32.0 37.8 38.0	38.1 38.1 38.1 38.1 38.2	38.2 31.8 38.2 32.7 38.2 32.7 38.4 32.5 38.6 32.9 38.6 32.9 38.5 32.7	AIR 35.0 35.0 36.0 36.0 36.4 36.4 36.5 36.5 36.5 36.5 36.5 36.5 36.7
	REL- TIME	0.098	3.52 3.52 3.52 4.02	:45 4.52 :15 5.02 :45 5.02 :45 6.52 :15 7.02 :45 7.52 :15 8.02	REL- -0.97 -0.72 -0.72 -0.653 1.03 1.53 1.53 2.03 3.53 3.63 5.03 5.03
FLAPNO=2583	ACTL TIME	9:15 9:30 9:45 10:00 10:14	11:15 11:45 12:45 13:45 14:15	14:45 15:15 16:15 16:15 17:15 17:45 18:15	ACTL 11ME 9:00 9:15 9:45 9:45 9:45 11:30 11:30 12:30 14:00 14:30 15:30
	TARG	9:15 9:30 9:45 10:00 10:15	11:15 12:15 12:45 13:45 14:45	14:45 15:15 15:45 16:45 17:15 18:15	1ARG 9:00 9:15 9:15 9:15 11:30 11:30 12:30 13:00 14:30 15:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

:			:		:		
	CUM	3.26 3.41 3.57 3.70 3.86		OLUC MUD	0.01 0.15 0.28 0.42 0.56 0.58 1.70 1.70 1.70 1.96 2.35 2.35 3.29 3.29 3.54	CUM GLUC 0.01 0.18	
NCSU=Yes	GLUC	0.33 0.31 0.27 0.33	NCSU=Yes	GLUC	0.60 0.55 0.55 0.65 0.59 0.52 0.52 0.31 0.25 0.25 0.25 0.25 0.25 0.25	0.76 0.69 0.69	
MEDVOL=503	ADJ RESIS	39.1 43.1 39.8 39.6 37.0	MEDVOL=537	ADJ RESIS	.02 37.1 .03 36.7 .03 36.7 .03 36.7 .03 36.9 .02 35.1 .02 35.1 .03 36.9 .04 39.4 .05 38.3 .04 39.4 .05 38.3 .04 39.4 .05 38.3 .04 39.4 .05 38.7 .05 38.7 .05 38.7 .07 38.7	ADJ RESIS 35.6 32.2 30.9	:
	ADJ FLOW	1.00 0.95 0.95 0.96		ADJ FLOW		1.01 1.01 1.00	
GROUP=3 mg HD	VRE- SIST	37.9 41.8 38.6 38.4 35.8	GROUP=3 mg HD	VRE- SIST	.17 38.4 .64 39.0 .63 38.8 .77 36.0 .89 38.3 .91 36.4 .98 40.6 .96 39.2 .95 39.6 .95 39.6 .95 39.6 .95 39.6 .95 39.6 .95 39.6 .95 39.6 .95 39.6 .95 39.6 .96 40.8 .98 41.2 .98 41.2 .98 40.0	VRE- SIST 35.3 32.0	
	LACT	1.01 0.95 1.01 1.25		LACT	000000000000000000000000000000000000000	LACT DEXT 0.06 0.31 0.51	
DOSETIME=9:58	DEXT	0.934 0.943 0.931 0.934 0.914	DOSETIME=10:28	DEXT	.071 0.784 .136 0.900 .131 0.903 .223 0.889 .263 0.849 .287 0.865 .294 0.886 .275 0.888 .275 0.88 .278 0.913 .248 0.943 .250 0.955 .229 0.956 .191 1.010 .198 1.000 .197 1.000 .1170 0.998 .1161 1.010	DEXT ROSV 0.729 0.767 0.781	
	LACT	0.237 0.221 0.233 0.246 0.249	DOSETI	LACT	0.071 0.136 0.138 0.263 0.287 0.275 0.278 0.278 0.278 0.279 0.198 0.191 0.191 0.169	LACT ATEV 0.046 0.145 0.213	
PHASE=2 FLAPWT=32.54 (continued)	DEXT	1.110 1.110 1.080 1.090	FLAPWT=27.36	DEXT	123 1.060 126 1.150 129 1.140 130 1.150 132 1.150 135 1.150 137 1.130 139 1.120 140 1.130 144 1.120 145 1.130 146 1.130 147 1.130 149 1.110 149 1.110 149 1.110	DEXT ROSA 1.150 1.160	
:=2 FLAPWT= (continued)	LACT	0.060 0.063 0.063 0.063		LACT	88888888888888888	LACT ATEA 0.022 0.022 0.024	
	MEAN	1.03	R PHASE=2	MEAN		HEAN FLOW 1.02 1.00	
IDE=95-23-4-L	MED	36.8 36.8 36.8 36.8	DE=95-23-5-R	MED TEMP	35.8 35.8 36.6 36.6 36.6 36.6 36.6 36.6 36.6 36	MED TEMP 36.2 36.3	
	BP MEAN	36 38 38 36	/SIDE=	BP MEAN		BP MEAN 36 32 31	,
ANIMAL/S	ART MEDPH	7.	ANIMAL/SI	ART Medph	7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4	ART MEDPH 7.4 7.4 7.4	,
/26/95	HUMI	34.5 34.1 33.5 34.5 35.1	01/95	HUMI	41.5 41.7 41.7 41.7 40.2 40.2 40.5 40.5 39.9	HUMI DITY 39.3 39.0	; }
DATE=10/26/95	AIR	36.7 36.7 36.8 36.8 36.8	DATE=11/01/95	AIR	36.7 36.8 41.5 36.8 41.5 36.8 41.3 36.6 41.7 36.6 41.7 36.8 42.1 36.8 42.1 36.8 40.1 36.8 36.8 40.1 36.8 36.8 40.1 36.8 36.8 40.1 36.8 36.8 36.8 36.8 36.8 36.8 36.8 36.8	AIR TEMP 36.2 36.5 36.8	
FLAPNO=2584	REL- TIME	6.03 6.53 7.03 7.53 8.03		REL- TIME	9:30 -0.97 9:45 -0.72 0:05 -0.47 0:15 -0.22 0:28 0.00 1:30 1.03 1:30 1.03 2:30 2.03 2:30 2.53 2:30 2.53 2:30 2.53 2:30 2.53 2:30 4.03 4:30 4.03 4:30 4.03 4:30 6.03 6:00 5.53 6:00 5.53 6:00 6.53 7:30 7.03 8:30 8.03	REL- TIME -0.97 -0.72	;
- FLAPN	ACTL TIME	16:00 16:30 17:00 17:30	FLAPN0=2585	ACTL TIME	9:30 9:45 10:00 10:15 11:00 11:30 12:30 14:30 16:00 16:30 17:30 17:30 18:30	ACTL TIME 9:15 9:30	
	TARG	16:00 16:30 17:00 17:30 18:00		TARG	9:30 10:00 10:15 10:30 11:00 12:30 12:30 12:30 14:30 15:30 15:30 16:30 17:30 17:30 18:30	TARG TIME 9:15 9:30 9:45	

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	GLUC	0.50	0.98	1.59	1.85	2.08	2.34	2.56	2.75	2.93	3.10	3.29	3.44	3.61	3.78	3.94	4.08
NCSU=Yes	GLUC	0.60	0.66	0.63	0.51	0.47	0.52	0.44	0.37	0.38	0.34	0.36	0.30	0.35	0.34	0.32	0.27
MEDVOL=515	ADJ RESIS	31.2	27.9	59.4	33.3	34.6	34.4	35.3	37.3	37.5	38.7	38.5	37.7	37.3	38.6	36.7	37.8
MEDV	ADJ FLOW	0.99	00	0.99	0.99	0.98	0.99	0.99	0.99	1.01	0.98	0.99	0.98	0.99	96.0	1.01	0.95
3 mg 15	VRE- SIST	31.0	27.7	29.1	33.0	34.3	34.2	35.0	37.0	37.3	38.4	38.2	37.4	37.0	38.3	36.5	37.5
GROUP=3 mg	LACT	0.65	0.82	96.0	0.98	1.02	9.	1.01	1.10	0.93	1.01	96.0	1.08	0.93	96.0	1.03	1.13
DOSETIME=10:13	DEXT	0.808	0.782	0.784	0.844	0.871	0.854	0.883	0.920	0.930	976.0	0.934	0.978	0.952	0.930	0.932	0.948
	LACT	0.247	0.328	0.372	0.313	0.306	0.328	0.284	0.268	0.234	0.232	0.236	0.224	0.225	0.232	0.225	0.225
PHASE=2 FLAPWT=33.94 (continued)	DEXT	1.150	1.150	1.140	1.130	1.140	1.150	1.130	1.130	1.140	1.140	1.140	1.150	1.150	1.130	1.110	1.110
=2 FLAP (contin	LACT	0.024	0.028	0.031	0.034	0.032	0.032	0.034	0.036	0.038	0.037	0.038	0.039	0.041	0.040	0.041	0.042
	MEAN	1.00	2.6	1.00	1.00	0.99	1.00	9.	1.00	1.02	0.99	1.00	0.99	1.00	0.97	1.02	96.0
IIMAL/SIDE=95-23-5-L	MED	36.6	36.6	36.7	36.9	37.1	37.2	37.2	37.2	37.2	37.3	37.2	37.2	37.1	36.8	36.8	36.9
/S1DE=(BP MEAN	33	8 8	5	33	34	34	32	37	38	38	38	37	37	37	37	36
ANIMAL	ART MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
701/95	HUMI	38.5	38.0	38.0	38.2	38.1	36.6	36.3	36.6	36.7	37.2	37.2	37.4	37.4	37.6	37.7	37.5
DATE=11/01/95	AIR	37.0	37.1	37.4	37.5	37.7	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.7	37.4	37.5	37.5
FLAPNO=2586	REL- TIME	-0.22	0.53	1.53	2.03	2.53	3.03	3.53	4.03	4.53	5.03	5.53	6.03	6.53	7.03	7.53	8.03
FLAPN	ACTL TIME	10:00	10:45	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15
	TARG	10:00	10:45	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15

0.01 0.13 0.25 0.25 0.25 0.25 1.27 1.66 1.27 2.29 3.20 3.20 3.20 3.20 3.20 3.20 NCSU=Yes 0.63 0.50 0.50 0.51 0.53 0.73 0.35 0.35 0.35 0.35 61.4 441.9 337.9 337.9 337.9 337.2 337.2 346.6 446.6 446.6 446.6 446.6 MEDVOL=493 ADJ RESIS APJ FLOH 0.95 0.95 0.95 0.97 0.95 0.95 0.95 0.95 ANIMAL/SIDE=95-23-7-R PHASE=2 FLAPWT=33.19 DOSETIME=10:12 GROUP=3 mg HD 0.08 0.70 0.70 0.80 0.97 1.04 1.03 1.03 1.03 1.03 1.03 1.03 1.03 LACT 0.717 0.825 0.826 0.788 0.740 0.740 0.710 0.750 0.835 0.835 0.835 0.929 0.929 0.929 0.059 0.142 0.317 0.317 0.464 0.464 0.464 0.464 0.377 0.356 0.276 0.276 0.250 LACT 1.070 1.110 1.120 1.120 1.120 1.110 1.100 1.100 1.100 1.100 DEXT 0.032 0.033 0.035 0.036 0.042 0.054 0.054 0.063 0.063 0.063 0.063 0.063 0.063 0.063 1.00 386.9 386.9 386.9 386.9 386.9 386.9 386.9 386.9 386.9 386.9 386.9 386.9 386.9 386.9 BP MEAN ART MEDPH DATE=11/02/95 AIR TEMP -0.03 -0.07 FLAPN0=2587 9:16 9:30 9:30 9:30 11:0:12 11:15 11:15 13:15 13:15 14:15 14:15 15:15 16:15 16:15 9:15 9:30 9:30 11:15 11:15 11:15 12:15 12:15 13:15 14:15 14:15 15:15 15:15 15:15 16:15 16:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

:			;												;		
6 6 6 6 5	CUM	3.86 4.02 4.18	6 6 7 8 8	OU10	0.01	0.50	1.42	2.22	3.21	3.58	3.83	3.97 4.09	4.19	4.45	1 1 1 1 3 6	UNC CUM	0.01 0.23 0.43 0.64
NCSU=Yes -	GLUG	0.30 0.33 0.31	NCSU=Yes -	GLUC UTIL	0.72	0.65 6.65 7.	0.78	0.76	0.63	0.27	0.25	0.29	0.21	0.25	NCSU=Yes	GLUC	0.66 0.90 0.80 0.82 0.76
MEDVOL=493	ADJ RESIS	39.0 39.1 35.8	MEDVOL=529	ADJ RESIS	42.2 30.6 29.0	28.7	26.0	33.8	37.3	44.1	39.8	40.0	42.2	39.5	MEDVOL=478	ADJ RESIS	40.2 29.8 28.4 25.7 25.9
MEDVO	ADJ FLOW	0.95 0.95 0.95	MEDVC	ADJ FLOW	1.02	1.02	.00	1.03	9.7.	2.0.5	1.03	1.02	1.02	1.02		ADJ FLOW	0.92 0.94 0.93 0.93
GROUP=3 mg HD	VRE- SIST	37.0 37.2 34.0	GROUP=3 mg HD	VRE- SIST	43.0 31.2 29.6	32.0 29.3	26.5	34.5	38.0	42.0	40.6	40.8	43.0	40.0	GROUP=3 mg HD	VRE- SIST	37.0 27.5 26.1 23.6 23.9
	LACT	1.05		LACT	0.08	0.89	0.98	0.89	1.08	2.1.5	1.07	1.08	1.09	0.99		LACT	0.04 0.30 0.56 0.71 0.80
DOSETIME=10:12	DEXT	0.912 0.907 0.908	DOSETIME=9:57	DEXT	0.782 0.799 0.824	0.815	0.755	0.757	0.834	0.977	0.991	0.971	1.000	0.970	DOSETIME=10:28	DEXT ROSV	0.796 0.710 0.728 0.713 0.713
DOSETIN	LACT	0.248 0.248 0.247		LACT	0.054 0.148 0.214	0.279	0.414	0.418	0.384	0.198	0.177	0.180	0.163	0.181		LACT	0.045 0.164 0.257 0.320 0.338
T=33.19 ed)	DEXT	1.080 1.090 1.080	ELAPWT=29.15	DEXT	1.130	1.130	1.140	1.130	1.130	1.10		1.1	1.100	1.090	FLAPWT=29.39	DEXT	1.120 1.140 1.120 1.110
PHASE=2 FLAPWT=33.19 (continued)	LACT	0.071 0.074 0.075	=2 FLAP	LACT	0.026 0.028 0.029	0.030	0.036	0.044	0.046	0.051	0.050	0.053	0.054	0.062		LACT	0.033 0.036 0.036 0.037 0.040
	MEAN	000.	L PHASE	MEAN	1.00				80.0				8.8	1.00	R PHASE=2	MEAN	1.00
DE=95-23-7-R	MED	37.7 38.0 38.0	SIDE=95-23-7-L PHASE=2	MED TEMP	37.2 35.9 36.5	36.6 36.6	36.7	36.6	36.6	36.6	36.6	36.6 36.7	36.8	36.8	ANIMAL/SIDE=95-26-10-R	MED	35.3 35.7 35.6 35.8
	BP MEAN	37 37	/SIDE=	BP MEAN	31.29	262	3 25 25	동 당	38 5	- 52 -	17:	۲ ۶	43	40	'SIDE=9	BP	37 28 27 27 27
ANIMAL/S	ART MEDPH	7.4 7.5	ANIMAL/	ART Medph	4.7	7.4	7.4	7.4	7.4	4.7	7.4	4.7	4.7	7.4	ANIMAL,	ART	44444
	HUM1 DITY	35.5 34.7 34.6	/02/95	HUMI	46.6 46.0 45.6	44.1 44.0	44.0	43.8	40.2	39.7	39.5	37.2	38.3	38.5	56/60/	HUMI	28.0 28.0 28.0 28.0
DATE=11/02/95	AIR	39.1 39.1 39.3	DATE=11/02/95	AIR	36.6 35.9 36.3	36.5	36.0	36.4	36.4	36.4	36.4	36.4 36.5	36.6	36.7	DATE=11/09/95	AIR TEMP	37.1 37.3 37.1 37.4 37.2
	REL- TIME	7.05 7.55 8.05	FLAPNO=2588	REL- TIME	-0.95 -0.70 -0.45	0.20	1.05	2.55	3.55	4,55	5.55	6.55	7.05	8.05		REL. TIME	-0.97 -0.72 -0.47 -0.22 0.00
· FLAPNO=2587	ACTL TIME	17:15 17:45 18:15	- FLAPN	ACTL TIME	9:00 9:15 9:30	9:45	11:30	12:00	13:30	14:30	15:30	16:00 16:30	17:00 17:30	18:00	- FLAPNO=2591	ACTL TIME	9:30 9:45 10:00 10:15
	TARG	17:15 17:45 18:15		TARG	9:00 9:15 9:30	9:45	11:30	12:00 12:30	13:30	14:30	15:30	16:00 16:30	17:00	18:00		TARG	9:30 9:45 10:00 10:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	CUM	1.22	1.97	2.82	3.54	3.80	4.03	4.24	4.42	4.60	4.77	4.95	5.13	5.34
NCSU=Yes	GLUC	0.78	0.80	0.87	0.71	0.52	0.44	0.43	0.37	0.35	0.35	0.36	0.35	0.42
MEDVOL=478	ADJ RESIS	25.0	26.1 24.6	25.7	42.8	67.3	73.8	80.1	83.6	81.6	84.9	7.98	87.1	84.2
	ADJ FLOW	0.92	0.92	0.93	0.93	0.92	0.92	0.91	0.92	0.94	0.93	0.00	0.91	0.00
GROUP=3 mg HD	VRE- SIST	23.0 26.3	24.0	23.6	39.4	62.0	68.0	73.7	77.0	75.1	78.5	9.62	80.2	9.77
_	LACT	0.93	0.97	0.98	1.06	1.05	1.08	1.03	1.1	1.13	1.16	0.94	0.91	1.41
DOSETIME=10:28	DEXT	0.740	0.708	0.691	0.759	0.835	0.893	0.896	0.931	0.943	0.952	0.928	0.937	0.879
	LACT	0.400	0.428	0.465	0.418	0.324	0.293	0.277	0.258	0.245	0.251	0.227	0.220	0.365
FLAPWT=29.39 ntinued)	DEXT	1.120	1.10	1.110	1.100	1.090	1.110	1.110	1.110	1.110	1.120	1.130	1.110	1.090
PHASE=2 FLAPWT: (continued	LACT	0.045	0.047	0.053	0.056	0.055	0.059	0.056	0.059	0.057	0.056	0.056	0.062	0.067
	MEAN	1.00	1.00	1.02	1.02	1.00	1.00	0.99	9.1	1.03	1.01	0.98	0.99	0.98
MAL/SIDE=95-26-10-R	MED	35.8 35.6	35.6 36.3	36.3	35.2	35.3	35.5	35.5	35.9	35.8	35.8	35.9	35.7	35.9
/SIDE=9	BP	23	2 52	% %	9	9	89	ĸ	12	11	2	28	62	92
ANIMAL	ART Medph	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
56/60.	HUMI	28.7	27.4	27.0	27.7	27.3	27.5	27.4	27.4	27.9	27.3	27.9	27.9	26.7
DATE=11/09/95	AIR	37.3	37.1 37.7	37.3	36.7	36.8	37.0	37.0	37.5	37.4	37.4	37.6	37.3	37.6
	REL- TIME	0.53	1.53	2.53	3.53	4.03	4.53	5.03	5,53	6.03	6.53	7.03	7.53	8.03
FLAPNO=2591	ACTL TIME	11:00	12:00	13:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	11:00	12:00	13:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

	CUM	OLUC	0.01	0.21	0.38	0.54	0.71	1.04	1.45	1.85	2.21	2.59	2.98	3.32	3.51	3.77	4.04	4.30	4.57	4.83	5.06	5.28
NCSU=Yes	CLUC	UTIL	1.01	0.79	0.71	0.61	0.69	0.69	0.79	0.80	0.73	0.75	0.78	0.69	0.36	0.53	0.55	0.51	0.55	0.51	97.0	0.45
	ADJ	RESIS	53.1	43.9	45.0	45.5	40.1	37.9	36.0	36.9	37.7	6.04	40.7	46.3	51.3	55.3	57.7	62.1	64.5	62.6	64.8	65.2
MEDVOL=523	ADJ	FLOW	1.00	1.00	0.98	0.99	1.00	1.00	1.03	1.00	1.01	0.98	0.98	0.99	1.01	1.01	0.99	0.98	0.99	1.02	1.00	1.01
GROUP=E tOH	VRE-	SIST	53.5	44.2	42.4	45.9	40.4	38.2	36.3	37.2	38.0	41.2	41.0	46.7	51.7	55.7	58.2	62.6	65.0	63.1	65.3	65.7
	LACT	DEXT	0.02	0.21	0.43	99.0	0.72	0.82	0.91	96.0	1.08	1.02	1.00	1.01	1.63	0.99	0.88	0.95	0.00	1.00	1.02	1.03
DOSETIME=10:15	DEXT	ROSV	0.613	0.730	0.762	0.790	0.778	0.772	0.732	0.716	0.713	0.698	0.709	0.758	0.763	0.739	0.761	0.801	0.820	0.893	0.889	0.880
	LACT	ATEV	0.042	0.116	0.190	0.243	0.293	0.331	0.401	0.437	0.450	0.452	0.455	0.408	0.344	0.310	0.299	0.302	0.299	0.290	0.284	0.282
FLAPWT=30.99	DEXT	ROSA	1.140	1.140	1.140	1.110	1.140	1.130	1.130	1.130	1.090	1.100	1.120	1.120	0.950	1.010	1.050	1.070	1.110	1.150	1.130	1.110
	LACT	ATEA	0.030	0.029	0.029	0.032	0.033	0.036	0.039	0.041	0.041	0.041	0.043	0.044	0.039	0.042	0.044	9,000	0.039	0.032	0.039	0.044
-L PHASE=2	MEAN	FLOW	0.99	1.00	26.0	0.98	0.99	9.	1.02	9.	1.00	0.97	0.98	0.99	1.01	1.01	0.98	0.98	0.99	1.02	9.	1.01
/SIDE=95-26-10-L	MED	TEMP	34.3	35.0	35.1	35.2	35.3	35.3	35.3	35.3	35.3	35.4	35.3	35.4	35.4	35.4	35.4	35.4	35.6	35.6	35.6	35.6
-/S10E=	æ	MEAN	23	77	77	45	0,	38	37	37	38	40	40	94	25	26	22	61	\$	z	65	%
ANIMA	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.4	7.4	7.4	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5
DATE=11/09/95	HUMI	DITY	32.0	31.6	31.3	30.4	31.1	56.6	29.8	59.6	30.0	56.6	29.3	29.0	29.7	29.3	29.3	59.4	28.8	29.5	29.5	29.3
DATE=1	AIR	TEMP	35.7	36.7	36.8	36.9	37.1	37.0	37.0	37.0	37.1	37.1	37.0	37.1	37.1	37.1	37.1	37.2	37.2	37.3	37.4	37.4
FLAPNO=2592	REL-	TIME	-1.00	-0.75	-0.50	-0.25	0.00	0.48	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	9.00	6.50	7.00	7.50
- FLAPN	ACTL	TIME	9:15	9:30	9:45	10:00	10:15	10:44	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45
	TARG	TIME	9:15	9:30	9:45	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

			:															:		
	CUM	5.51		CUM	0.01	97.0	0.84	1.54	2.31	2.74	3.52	3.89	4.24	4.85	5.17	5.45	5.97		CUM	0.01 0.23 0.35 0.48 0.61 1.18
NCSU=Yes	GLUC	0.45	NCSU≕Yes	GLUC UTIL	1.46	0.57	0.54	0.0	0.79	0.86	0.82	5.73	2.0	0.61	0.65	0.56	0.49	NCSU=Yes -	GLUC	1.28 0.89 0.48 0.50 0.53 0.54
	ADJ RESIS	65.5	MEDVOL=471	ADJ RESIS	7.1.	55.4	44.1	39.7	39.5 40.2	43.4	52.3	54.5	57.3	58.1	58.1	57.3	57.9		ADJ RESIS	63.3 49.8 44.8 41.8 37.5 36.8 33.5
MEDVOL=523	ADJ FLOW	1.01		ADJ FLOW	0.91	0.92	2.0	0.91	0.92	0.90	8.0	0.90	0.89	0.91	0.91	0.9	0.90	MEDVOL=487	ADJ FLOW	0.95 0.94 0.93 0.93 0.92
GROUP=E tOH	VRE- SIST	0.99	GROUP=3 mg HD	VRE- SIST	0.09	20.5	40.0	36.0	35.8 36.5	39.4	44.4	49.5	52.0	52.7	52.7	52.0	52.5	GROUP=E tOH	VRE- SIST	59.4 46.8 42.0 39.2 35.2 34.5
	LACT	1.03		LACT	0.00	0.57	0.84	0.92	0.97	0.86	9.0 88.0	0.93	0.92	0.94	92.0	0.87	0.86		LACT	0.01 0.02 0.18 0.37 0.57 0.74
DOSETIME=10:15	DEXT	0.848	DOSETIME=10:29	DEXT ROSV	0.529	0.908	0.926	0.846	0.844	0.800	0.821	0.814	0.852	0.901	0.893	0.931	0.955	DOSETIME=10:15	DEXT	0.525 0.725 0.885 0.911 0.902 0.868
	LACT	0.290		LACT	0.023	0.157	0.212	0.298	0.324	0.337	0.328	0.312	0.299	0.261	0.230	0.227	0.203		LACT	0.025 0.030 0.062 0.113 0.171 0.219
FLAPWT=30.99	DEXT	1.080	FLAPWT=24.75	DEXT	1.130	1.140	1.150	1.140	1.150	1.160	1.150	1.120	1.150	1.150	1.160	1.160	1.160	FLAPWT=29.55	DEXT	1.150 1.160 1.160 1.130 1.170
PHASE=2 FLAPWT (continued)	LACT	0.051		LACT	0.022	0.024	0.023	0.027	0.026	0.027	0.028	0.027	0.026	0.027	0.028	0.028	0.027	PHASE=2 FL	LACT	0.021 0.021 0.022 0.022 0.022 0.022
	MEAN	1.00	R PHASE=2	MEAN	888	20.6	888	1.00	1.01	0.99	0.0	0.99	0.98	1.03	1.01	9.0	0.99		MEAN	1.00
IDE=95-26-10-L	MED	35.6	ANIMAL/SIDE=95-108-4-R	MED	35.1	35.1	35.6	35.7	35.7	35.7	35.7	35.7	35.9	35.9	35.9	35.9	35.9	ANIMAL/SIDE=95-108-4-L	MED	33.1 34.7 34.9 35.1 35.2 34.9
L/SIDE=	BP MEAN	%	/SIDE=5	BP MEAN	283	27.	31	38	3 2	36	4 7	65	<u>.</u>	4 K	53	2 2	22	L/SIDE	BP MEAN	47 47 39 34 31
ANIMAL/S	ART MEDPH	7.5	ANIMAL,	ART MEDPH	7.4	7.7	7.7	7.4	7.4	7.4	4.7	7.4	7.4	7.7	7.3	7.4	7.4	ANIMA	ART Medph	444444
56/60/	HUMI	28.5	15/95	HUMI DITY	28.7	31.0	30.1	30.1	29.4 30.0	29.8	9.65 8.87 8.87	29.9	29.4	29.0	28.9	28.8	28.5	/15/95	HUMI	29.5 29.7 29.0 28.6 28.6 27.7
DATE=11/09/95	A1R TEMP	37.4	DATE=11/15/95	AIR	36.1	36.7	37.3	37.4	37.4	37.4	37.4	37.4	37.5	37.6	37.6	37.6	37.7	DATE=11/15/95	AIR	33.7 36.2 36.4 36.6 36.6
FLAPNO=2592	REL- TIME	8.00		REL- TIME	-0.98	5.0.5	0.52	1.52	2.52	3.02	3.5 2	4.52	5.02	6.02	6.52	7.02	8.02	FLAPNO=2594	REL- TIME	-1.00 -0.75 -0.25 0.00 0.00
FLAPN	ACTL TIME	18:15	- FLAPNO=2593	ACTL TIME	9:30	10:15	11:00	12:00	12:30	13:30	14:00	15:00	15:30	16:30	17:00	17:30	18:30	FLAPN	ACTL	9:15 9:30 9:45 10:00 10:15 11:15
	TARG	18:15	1 1 1 1 1 1	TARG	9:30	10:15	11:00	12:00	12:30	13:30	14:00	15:00	15:30	16:30	17:00	17:30	18:30		TARG	9:15 9:30 9:45 10:00 10:15 10:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	CUM	1.48 1.79 2.06 2.26 2.47 2.68	2.87 3.04 3.23 3.35 3.51 3.69 4.00	פרחכ נחש	0.01 0.34 0.34 0.57 1.05 1.30 1.52 2.39 2.39 2.39 4.40 4.40 4.40 4.40
NCSU=Yes	GLUC	0.59 0.61 0.54 0.42 0.42	0.40 0.33 0.37 0.37 0.35 0.35	NCSU=Yes GLUC UTIL	0.98 0.78 0.58 0.45 0.65 0.59 0.59 0.59 0.59 0.59 0.59
	ADJ RESIS	32.5 32.0 33.7 38.0 37.3		MEDVOL=480 ADJ ADJ FLOW RESIS	67.4.1 67.4.1 62.3.3 53.3.3 38.9 38.9 38.9 38.9 4.0.4 4.1.3 4.2.8 4.6.3 4.6.3 50.8
MEDVOL=487	ADJ FLOW	0.95	0.93 0.94 0.94 0.94 0.93	MEDVOI ADJ FLOW	0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.93 0.93 0.93 0.93
GROUP=EtOH	VRE- SIST	30.5 31.6 35.6 35.0	35.2 34.8 35.0 35.0 35.0	GROUP=EtOH	84.35 57.4.4.35 57.4.4.35 57.4.35 5
	LACT	0.95 1.07 1.01 1.01	0 0 0 M 0 0 0 0	9.5	0.07 0.03 0.60 0.60 0.85 0.98 0.98 0.98 0.98 0.89 0.89 0.89 0.89
DOSETIME=10:15	DEXT	0.862 0.868 0.973 0.954	0.983 0.996 0.987 1.050 0.992 1.020	DOSETIME=10:30 ACT DEXT LA TEV ROSV DE	0.676 0.773 0.836 0.908 0.915 0.915 0.916 0.916 0.883 0.862 0.862 0.854 0.854 0.854 0.854 0.854 0.878 0.878
	LACT	0.283 0.299 0.314 0.210 0.225	Meerer	3.5	0.024 0.049 0.093 0.129 0.210 0.244 0.274 0.255 0.275 0.285 0.285 0.266 0.266
FLAPWT=29.55 inued)	DEXT	1.150	1.180 1.170 1.170 1.170 1.170 1.170 1.180	FLAPWT=29.94	1.170 1.140 1.120 1.120 1.140 1.170 1.180 1.180 1.170 1.180 1.170 1.160 1.160
PHASE≂2 FLAPWT (continued)	LACT	0.022 0.023 0.022 0.022 0.022		PHASE=2 FI NN LACT NN ATEA	0.025 0.024 0.024 0.025 0.027 0.027 0.017 0.017 0.015 0.013 0.007 0.008
	MEAN	1.00	0 4 0 0 0 4 0 0		0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99
VIMAL/SIDE=95-108-4-L	MED	88888888888888888888888888888888888888	35.5.5.4.4.3.35.5.4.4.3.35.5.5.4.4.4.3.35.5.5.4.4.3.35.5.5.4.4.3.35.5.4.4.4.3.35.5.4.4.4.3.35.5.4.4.4.4	NIMAL/SIDE=95-108-6-R RT BP MED ME DPH MEAN TEMP FL	2.4.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2
L/SIDE=	BP	35 35 31 35 35 35 35 35 35 35 35 35 35 35 35 35 3	333333333333333333333333333333333333333	L/SIDE= BP MEAN	6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
ANIMA	ART MEDPH	444444	4444444	ANIMA ART MEDPH	444444444444444444
/15/95	HUMI	27.7 26.8 27.3 26.8 26.5 27.3	26.7 26.9 26.9 26.8 26.8 26.8 26.8	DATE=11/16/95 AIR HUMI TEMP DITY	31. 29.1. 29.1. 29.1. 29.1. 29.2. 20.2. 20
DATE=11/15/95	AIR	36.8 36.9 36.9 36.9	37.0 37.0 37.0 37.0 37.0	DATE=11 AIR TEMP	35.3 36.6 36.6 36.8 36.8 36.9 36.9 36.9 37.1 37.1 37.1 37.1 37.1
FLAPNO=2594	REL- TIME	2.50 3.50 4.00	4.50 5.00 6.00 6.50 7.00 7.50	FLAPNO=2595 CTL REL- IME TIME	-1.00 -0.75 -0.55 -0.55 -0.25 -0.25 -0.50
- FLAPN	ACTL TIME	11:45 12:45 12:45 13:45 14:15	14:45 15:15 15:45 16:45 17:45 18:15	FLAPN ACTL TIME	9:35 9:45 10:00 11:30 11:30 11:30 14:00 15:30 15:30 17:30 17:30 17:30 17:30 17:30
	TARG	11:45 12:45 12:45 13:45 14:15	14:45 15:15 16:45 16:45 17:45 18:15	TARG	9:30 10:00 10:15 10:15 11:30 12:30 13:30 14:30 15:30 16:30 16:30 17:30 17:30 17:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

	Wno Crnc	0.01 0.18 0.35 0.63 0.63 0.63 0.63 1.15 1.42 1.42 1.42 2.33 2.33 3.19 3.19 4.08 4.09 4.09	CUM GLUC 0.01 0.26 0.64 0.64 1.23 1.61 1.97 2.35 2.74 2.35 3.68 3.68 4.19
NCSU=Yes	GLUC	1.05 0.68 0.69 0.53 0.49 0.53 0.61 0.62 0.58 0.59 0.59 0.55 0.55	6LUC 0.86 1.00 0.78 0.75 0.75 0.75 0.76 0.76 0.76 0.76 0.76 0.77
MEDVOL=525	ADJ RESIS	01 105.3 00 69.9 00 52.9 01 44.5 00 38.1 00 37.8 00 37.8 00 39.9 01 37.8 00 40.1 37.8 01 42.7 01 42.7 01 42.7 01 44.5 01 44.5 01 46.2 01 46.2	ADJ 66.8 66.8 67.1 58.8 49.1 33.4 33.4 44.2 46.2 47.0 47.0
	ADJ FLOW		ADJ 1.02 1.00 11.00 0.99 0.99 0.98 0.98 0.98 0.98 0.98 0
GROUP=No Topical	VRE- SIST	0.03 106.5 1 0.15 70.7 1 0.30 53.5 1 0.54 45.0 1 0.61 40.6 1 0.89 37.4 1 0.89 38.4 1 0.88 40.4 1 0.92 41.8 1 1.07 43.2 1 0.93 45.0 1 0.93 45.0 1 0.93 46.7 1 0.94 48.0 0 0.97 46.7 1 0.97 46.7 1 0.97 46.7 1 0.98 48.0 0 0.98 48.0 0 0.98 48.0 0	VRE- SIST 66.0 66.3 58.1 58.1 33.0 33.0 33.0 34.8 34.8 41.4 41.4 41.4 45.3 46.5
	LACT	0.03 0.15 0.54 0.61 0.61 0.88 0.88 0.88 0.93 0.93 0.93 0.93 0.93 0.93	LACT 0.11 0.37 0.51 0.84 0.85 0.91 0.92 0.87 0.89 0.89
DOSETIME=10:15	DEXT	0.038 0.645 0.073 0.845 0.126 0.831 0.166 0.863 0.196 0.884 0.227 0.906 0.246 0.936 0.281 0.887 0.281 0.887 0.289 0.900 0.289 0.877 0.285 0.877 0.285 0.877 0.285 0.877 0.285 0.877 0.285 0.877 0.285 0.877 0.285 0.877 0.285 0.877 0.287 0.882 0.278 0.873 0.287 0.883 0.278 0.873 0.278 0.873 0.281 0.873 0.281 0.873 0.281 0.873 0.281 0.873	DEXT ROSV 0.778 0.842 0.842 0.874 0.876 0.975 0.903 0.956 0.956 0.956
DOSETIN	LACT	0.038 0.073 0.126 0.196 0.227 0.246 0.281 0.289 0.285 0.285 0.285 0.285 0.285 0.285 0.285 0.285 0.285 0.285 0.285	LACT ATEV 0.054 0.232 0.232 0.232 0.232 0.272 0.272 0.272 0.272 0.259 0.259 0.184
FLAPWT=29.3	DEXT	024 1.160 023 1.180 024 1.170 026 1.120 027 1.160 028 1.180 027 1.180 027 1.180 027 1.180 027 1.180 027 1.180 027 1.180 010 1.180 010 1.170 019 1.160 019 1.170 019 1.160 019 1.160 019 1.160 019 1.160 019 1.160 019 1.160 019 1.160 019 1.160	DEXT ROSA 1.100 1.140 1.150 1.190 1.190 1.190 1.190 1.190 1.190 1.190
	LACT	0000000000000000000	LACT ATEA 0.018 0.022 0.022 0.022 0.022 0.022 0.022 0.019 0.021 0.021 0.021
L PHASE=1	MEAN	1.00 0.39 1.00 1.01 0.39 0.39 0.39 1.01 1.01 1.00 0.98 0.98 0.98	MEAN FLOW 1.03 1.01 1.01 1.01 1.01 0.99 0.99 0.99 1.02 1.02
DE=95-108-6-L	MED	106 32.1 70 34.7 53 35.1 45 35.1 38 35.3 37 35.3 38 35.3 40 35.3 40 35.3 40 35.3 41 35.3 42 35.3 44 35.3 47 35.3 47 35.3 47 35.3 47 35.3 47 35.3 48 35.3 49 35.3 40 35.3 41 35.3 42 35.3 43 35.3 44 35.3 47 35.3 47 35.3	MED 33.9 34.9 34.9 34.9 34.9 34.9 34.9 34.9
-	BP MEAN	106 70 70 40 40 40 44 43 43 43 44 47 47 47 47 47 47 47 47 47 47 47 47	MEAN MEAN 68 68 67 67 67 67 67 67 67 67 67 67 67 67 67
ANIMAL/S	ART MEDPH	7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4	MEDPH 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.7 7.4 7.7 7.4 7.7 7.7
	HUM I DITY	806689989810216477124	HUMI 20.5 29.8 28.9 28.9 27.8 27.9 27.9 28.7 28.7 28.3 28.5 28.5
DATE=11/16/95	AIR	34.5 34.5 34.5 34.5 34.5 34.5 34.5 34.5	AIR 18 18 18 18 18 18 18 18 18 18 18 18 18 1
	REL- TIME		TIME -1.00 -0.75 -0.25 0.00 0.50 0.50 0.50 0.50 0.50 0.50
FLAPN0=2596	ACTL TIME	9:15 -1. 9:30 -0. 9:30 -0. 10:05 -0. 10:15 0. 11:45 0. 11:45 1. 12:45 2. 14:45 4. 14:45 4. 15:15 5. 17:45 6. 17:45 7.	ACTL 7 IME 9:15 9:30 9:45 10:00 10:15 11:15 12:45 13:15 14:45 15:15 15:15
1 8 8 8 8	TARG		TARG 9:15 9:35 9:35 10:00 10:15 11:15 11:15 12:15 13:15 14:15 15:15 15:15 15:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND SIGMA BSA

i										
	CUM	4.63 4.88 5.01 5.24 5.42		SUNG	0.01	0.52	1.42	2.22	3.52	3.97 4.44 4.66 4.89 5.12 5.39
NCSU=Yes	GLUC	0.44 0.49 0.26 0.47 0.36	NCSU=Yes	GLUC	0.99	0.69	0.80	0.79	0.60	0.37 0.48 0.44 0.46 0.46
MEDVOL=513	ADJ RESIS	47.8 47.3 48.6 47.1 45.3		ADJ RESIS	77.8 58.9	50.8	42.9 38.0 38.9	39.2 40.8 44.8	50.3	54.2 54.7 57.3 59.1 58.1 83.0
	ADJ FLOW	0.98 0.99 0.99 1.00	MEDVOL=498	ADJ	0.98	0.96	0.95	0.95	0.95	0.95 0.95 0.96 0.96 0.96
GROUP=No Topical	VRE- SIST	47.2 46.8 48.0 46.5 44.8	GROUP=EtOH	VRE- SIST	74.6 56.5	44.6	36.5	37.6	48.5 48.5 64.5 64.5 64.5 64.5 64.5 64.5 64.5 64	52.5 52.5 56.7 57.4 55.7
	LACT	0.96 0.85 1.38 0.82		LACT	0.02	0.50	0.82	0.99	0.86	0.82 0.79 0.79 0.80 0.80
DOSETIME=10:15	DEXT	1.010 1.020 1.060 1.030	DOSETIME=9:58	DEXT	0.710	0.860	0.860	0.838	0.948	0.970 1.020 1.000 1.020 1.020
DOSETIN	LACT	0.185 0.182 0.161 0.165 0.157	.21 DOSI	LACT	0.030	0.174	0.276	0.334	0.246	0.204 0.206 0.180 0.177 0.177 0.179
FLAPWT=23.21 continued)	DEXT	1.180 1.210 1.160 1.210 1.170	FLAPWT=26.21	DEXT	1.150	1.160	1.170	1.180	1.210	1.130 1.130 1.190 1.220 1.210 1.230
3	LACT	0.021 0.020 0.023 0.018 0.016		LACT	0.020	0.023	0.021	0.022	0.021	0.021 0.021 0.021 0.020 0.020
PHASE=1	MEAN	1.00	SIDE=95-36-9-L PHASE=2	MEAN	1.01	5.5	1.00	268	96.6	0.0000000000000000000000000000000000000
E=95-36-9-R	MED TEMP	34.9 34.9 34.9 34.9	E=95-36-	MED	34.4	35.4	35.6	35.7	35.7	35.8 35.8 35.7 35.7 35.7
	BP	47 47 47 47		BP	27.3	52 63	37 41	86.67	48 48 48 48 48 48	52 54 54 80 80
ANIMAL/SID	ART MEDPH	7.4.7.7.7.4.7.7.7.7.7.7.7.7.7.7.7.7.7.7	5 ANIMAL	ART MEDPH	7.4	7.7	4.7	7.7	7.4	744444
	HUMI	28.3 28.7 28.7 28.6 28.6	DATE=11/22/95	HUMI	33.2	31.3	30.8	30.3	30.0	29.6 30.1 31.5 30.7 28.8 30.4 30.2
DATE=11/22/95	A1R TEMP	36.5 36.5 36.5 36.5		AIR TEMP	35.3 36.0	36.5	36.7 36.8 36.8	36.9	36.9	36.9 36.9 36.9 36.9 36.9
=2597 D	REL- TIME	6.00 6.50 7.00 7.50 8.00	FLAPN0=2598	REL- TIME	-0.97	0.00	1.03	2.53	3.53 4.03 57.7	5.03 6.03 7.03 7.53 8.03
FLAPNO=2597	ACTL TIME	16:15 16:45 17:15 17:45	··· FLA	ACTL	9:00	9:45	10:30	12:00	13:30	15:00 16:00 16:30 17:30 17:30
	TARG	16:15 16:45 17:15 17:45 18:15		TARG	9:15	9:45 10:00	10:30 11:00 11:30	12:30	13:30	15:30 16:30 16:30 17:30 17:30 18:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	SLUC	0.01	0.45	0.58	0.72	1.01	1,33	1.64	2.01	5.40	2.73	3.08	3,48	3.85	4.19	4.55	4.92	5.24	5.57	5.86	6.17
NCSU=Yes	GLUC	9,50	0.71	0.55	0.53	0.59	0.62	0.64	0.74	0.77	29.0	69.0	0.81	0.73	0.70	0.72	0.74	0.63	0.65	0.59	0.62
MEDVOL=515	ADJ RESIS	46.4	85.8	89.1	79.0	73.3	66.2	62.5	9.65	57.6	9.75	54.1	54.1	53.1	52.9	52.4	50.1	6.67	52.5	51.4	50.1
	ADJ FLOW	1.0	1.00	0.99	0.99	0.98	0.98	0.99	1.01	1.01	26.0	1.00	1.00	1.00	0.98	0.97	1.00	1.00	0.95	26.0	0.98
GROUP=No Topical	VRE- SIST	46.1	85.1	88.4	78.4	72.7	65.7	62.0	59.1	57.1	57.1	53.7	53.7	52.7	52.5	52.0	8.67	49.5	52.1	51.0	49.7
GROUP=	LACT	0.13	9.0	0.79	0.93	1.0	1.06	1.07	96.0	9.	1.13	1.07	0.0	0.9	0.98	0.94	0.0	1.05	1.03	1.09	1.18
DOSET IME=10:15	DEXT	0.591	0.888	0.918	0.934	0.950	0.927	0.922	0.927	0.915	906.0	0.933	0.910	0.939	0.948	0.916	0.915	0.937	0.928	0.937	0.905
DOSETIA	LACT	0.085	0.178	0.170	0.195	0.233	0.260	0.269	0.274	0.296	0.302	0.289	0.280	0.278	0.267	0.266	0.259	0.256	0.270	0.256	0.293
FLAPWT=23.22	DEXT	1.220	1.160	1.130	1.140	1.180	1.170	1.170	1.210	1.210	1.170	1.200	1.220	1.220	1.220	1.200	1.200	1.180	1.190	1.170	1.150
FLAPW	LACT	0.003	0.003	0.003	0.003	0.001	0.003	0.003	0.002	0.001	0.004	0.002	0.001	0.000	0.001	0.00	0.002	0.001	0.001	0.001	0.004
PHASE=1	MEAN	1.02	.0.	1.00	1.00	0.99	0.99	1.00	1.02	1.02	0.98	1.01	1.01	1.01	0.99	0.98	1.01	1.01	96.0	0.98	0.99
L/SIDE=95-34-12-R	MED	35.7	35.1	35.3	35.2	35.4	35.4	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.4	35.5	35.5	35.6
(DE=95	BP MEAN	74	8	88	28	75	65	62	9	28	26	24	24	23	25	51	20	20	20	20	65
ANIMAL/S	ART	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
	HUMI	33.1	32.7	31.9	31.3	30.9	31.0	31.0	30.8	30.5	30.6	30.2	29.8	29.7	29.3	28.9	29.0	29.4	59.6	29.3	29.5
rE=11/29	AIR	36.7	36.6	36.7	36.8	36.9	36.9	36.9	36.9	36.8	36.9	36.9	36.9	36.9	36.9	36.9	36.9	37.0	36.9	36.9	37.0
599 DAT	REL- TIME	-1.00	-0.50	-0.25	0.00	0.50	1.02	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	9.00	6.50	7.00	7.50	8.00
FLAPNO=2599 DATE=11/29/95	ACTL TIME	9:15	9:45	10:00	10:15	10:45	11:16	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15
	TARG	9:15	9:45	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15

0.01 0.22 0.22 0.28 0.58 1.00 1.27 1.27 1.27 1.28 2.12 2.12 2.41 2.65 3.20 3.20 3.76 NCSU=Yes ADJ RESIS MEDVOL=479 ADJ FLOW 0.92 0.92 0.92 0.93 0.91 0.91 0.91 0.93 0.93 ANIMAL/SIDE=95-34-12-L PHASE=2 FLAPWT=29.89 DOSETIME=10:00 GROUP=EtOH VRE-SIST LACT 0.654 0.785 0.762 0.862 0.837 0.925 0.926 0.926 0.927 0.927 0.927 0.927 DEXT ROSV 0.070 0.136 0.195 0.195 0.246 0.274 0.285 0.285 0.284 0.284 0.284 0.284 0.284 0.284 0.284 0.284 LACT 1.220 1.170 1.170 1.180 1.180 1.190 1.190 1.190 1.190 1.190 DEXT ROSA 0.003 0.003 0.003 0.002 0.002 0.002 0.002 0.003 0.004 0.004 0.004 0.004 0.004 0.004 LACT MEAN MED TEMP BP MEAN ART Medph DATE=11/29/95 HUMI AIR TEMP -1.00 -0.75 -0.25 FLAPN0=2600 REL-TIME 9:00 9:15 9:30 9:30 9:45 9:45 11:00 11:30 12:30 13:30 14:30 14:30 15:30 15:30 ACTL TIME

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKROOT BSA

1			:			;		
	2019 CUM	4.02 4.25 4.78 5.10		OLUG	0.01 0.17 0.30 0.57 0.57 1.21 1.81 2.41 2.65 2.65 3.33 3.57 4.08 4.08		SUNG	0.01
NCSU=Yes	GLUC UTIL	0.51 0.48 0.50 0.56 0.63	NCSU=Yes	GLUC	0.91 0.53 0.57 0.57 0.58 0.62 0.62 0.62 0.62 0.63 0.63 0.64 0.64 0.65 0.65 0.65 0.65 0.65	NCSU=Yes	GLUC	0.81 0.85 0.68
	ADJ RESIS	56.9 56.6 54.7 55.3	-469 NCS	ADJ RESIS	64.3 47.3 47.3 46.7 48.5 56.2 56.2 57.6 57.6 77.4 77.8 80.1 77.8	MEDVOL=462	ADJ RESIS	74.1 61.8 60.4
MEDVOL=479	ADJ FLOW	0.93 0.93 0.93 0.93	MEDVOL=469	ADJ FLOW	0.92 0.91 0.91 0.90 0.90 0.92 0.92 0.92 0.93 0.93 0.93 0.93 0.93		ADJ FLOW	0.88 0.89 0.88
GROUP=E tOH	VRE- SIST	52.5 52.3 50.5 51.0 48.8	GROUP=EtOH	VRE- SIST	58.1 45.8 42.7 42.0 42.0 42.0 50.7 50.7 70.0 70.0 70.3 70.3 70.3	GROUP=No Topical	VRE- SIST	66.0 55.0 53.8
	LACT	1.08 1.12 1.04 0.97		LACT	0.11 0.29 0.69 0.98 0.98 0.94 1.02 1.03 0.93 0.93 0.93		LACT	0.07
DOSETIME=10:00	DEXT	0.946 0.932 0.944 0.900 0.878	DOSETIME=9:58	DEXT ROSV	0.699 0.861 0.909 0.854 0.872 0.872 0.825 0.829 0.839 0.886 0.891 0.908 0.865 0.868	DOSETIME=10:15	DEXT	0.765 0.732 0.803
	LACT	0.276 0.270 0.256 0.275 0.375		LACT	0.055 0.103 0.161 0.220 0.321 0.333 0.333 0.248 0.248 0.244 0.254 0.254 0.267 0.267	DOSETIM	LACT	0.027 0.078 0.152
PHASE=2 FLAPWT=29.89 (continued)	DEXT	1.200 1.170 1.190 1.180	FLAPWT=33.38	DEXT	1.200 1.210 1.210 1.180 1.190 1.170 1.150 1.150 1.150 1.150 1.150	FLAPWT=26.77	DEXT	1.130
SE=2 FLAPWT (continued)	LACT	0.001 0.003 0.003 0.003	PHASE=2 FL	LACT	0.000 0.001 0.003 0.003 0.003 0.000 0.000 0.000 0.000 0.000 0.000 0.000		LACT	0.000
	MEAN	1.001		MEAN	1.02 1.01 1.01 1.01 1.02 1.02 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03	PHASE=1	MEAN	1.00
ANIMAL/SIDE=95-34-12-L	MED	35.3 35.3 35.3 35.3	SIDE=95-34-9-L	MED	335 52 53 53 53 53 53 53 53 53 53 53 53 53 53	E=95-39-15-R	MED	35.8 35.6 35.5
-/SIDE=	BP MEAN	53 51 51 51 49		BP MEAN	59 443 443 443 443 443 443 443 443 443 44	1DE=95	BP MEAN	53
ANIMAL	ART Medph	7.4 7.4 7.4 7.4	ANIMAL/	ART MEDPH	44444444444444444	ANIMAL/SID	ART Medph	7.4
129/95	HUMI	27.9 28.1 28.4 28.5 28.5	DATE=11/30/95	HUMI	4.1.8 3.0.0 3.		HUM1 DITY	32.8 30.7 30.4
DATE=11/29/95	A1R TEMP	36.5 36.5 36.5 36.5	DATE=1	AIR	35.9 35.9 35.9 35.9 35.9 35.9 35.9 35.9	DATE=12/06/95	AIR	36.1 36.4 36.3
FLAPNO=2600	REL- TIME	6.00 6.50 7.00 7.50 8.00	FLAPNO=2602	REL- TIME	-0.97 -0.72 -0.72 -0.67 -0.22 0.00 0.00 0.00 0.03 1.53 2.53 3.03 3.63 4.57 4.57 6.03 6.03 6.03 8.03		REL- TIME	-1.00 -0.75 -0.50
FLAPN	ACTL TIME	16:00 16:30 17:00 18:00	· FLAP	ACTL TIME	9:00 9:15 9:15 9:15 9:15 10:30 11:30 11:30 14:32 14:32 15:30 15:30 15:30 16:30 17:30	FLAPNO=2603	ACTL TIME	9:15 9:30 9:45
	TARG TIME	16:00 16:30 17:00 17:30 18:00		TARG	9:15 9:15 9:15 9:15 10:00 11:30 12:30 12:30 14:30 15:30 17:30 17:30 17:30		TARG	9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	SLUC CUM	0.55	1.04	1.62	1.96	2.61	2.89	3.16	3.45	3.74	4.01	4.36	4.76	5.13	5.52	5.94
NCSU=Yes	GLUC	0.62	0.65	0.63	0.67	0.60	0.57	0.52	0.59	0.57	0.55	0.70	0.79	0.75	0.78	0.84
MEDVOL=462	ADJ RESIS	58.7	50.3	2.95	61.0	66.3 66.3	82.8	80.1	87.9	93.2	95.8	81.2	90.3	88.7	88.5	84.3
	ADJ FLOW	0.89	0.89	0.88	0.89	8,0	0.88	0.00	0.90	0.89	0.88	0.00	0.89	0.89	0.00	0.89
GROUP=No Topical	VRE- SIST	52.3	51.8	50.5	54.3	59.0	73.7	71.3	78.2	83.0	85.3	72.3	80.4	79.0	78.8	75.0
GROUP:	LACT	0.68	0.90	0.95	0.95	1.01	0.98	1.05	0.94	0.95	1.04	1.07	1.02	1.1	1.04	0.95
DOSETIME=10:15	DEXT	0.824	0.820	0.858	0.859	0.882	0.885	0.909	0.889	0.885	0.881	0.821	0.797	0.827	0.787	0.787
DOSETIA	LACT	0.189	0.263	0.271	0.286	0.273	0.255	0.248	0.248	0.243	0.260	0.336	0.362	0.371	0.358	0.360
FLAPWT=26.77 continued)	DEXT	1.100	1.110	1.140	1.160	1.170	1.140	1.140	1.150	1.140	1.130	1.130	1.150	1.160	1.130	1.160
l FLAPI (contir	LACT	0.001	0.000	0.004	0.00	0.002	0.005	900.0	0.003	0.002	0.002	0.004	0.002	0.002	0.002	0.005
PHASE=	MEAN	1.00	1.01	0.99	9.	5 6.	0.99	1.01	1.01	1.00	0.99	1.01	1.00	1.00	1.02	1.00
/SIDE=95-39-15-R	MED	35.5	35.5	35.6	35.6	35.7	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
1DE=95	8P MEAN	52	45	2	54	2 2	ĸ	22	2	83	84	12	8	62	8	2
ANIMAL/S	ART Medph	7.4	7.4	7.4	7.4	4.7	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
	HUMI	30.8	29.5	29.6	29.6	28.5	26.6	28.0	32.6	28.0	30.0	27.7	28.1	28.3	30.1	31.5
DATE=12/06/95	AIR	36.3	36.3	36.4	36.3	36.2 36.4	36.4	36.4	36.4	36.4	36.2	36.5	36.5	36.5	36.5	36.5
	REL- TIME	-0.25	0.50	1.50	2.00	3.00	3.50	4.00	4.50	2.00	5.50	9.00	6.50	7.00	7.50	8.00
FLAPNO=2603	ACTL TIME	10:00	10:45	11:45	12:15	12:45	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15
	TARG	10:00	10:45	11:45	12:15	12:45	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15

0.01 0.23 0.23 0.59 0.59 0.74 1.32 1.32 1.32 2.42 2.42 2.42 2.42 3.30 4.38 4.38 NCSU=Yes 63.2 55.25 55.25 60.11 60.11 73.7 73.7 73.7 79.7 79.7 76.9 ADJ RESIS MEDVOL=512 ADJ FLOW ANIMAL/SIDE=95-39-15-L PHASE=2 FLAPWT=25.21 DOSETIME=10:00 GROUP=EtOH 0.03 0.16 0.31 0.51 0.53 0.83 0.83 0.94 1.02 1.02 0.99 LACT 0.759 0.742 0.847 0.887 0.888 0.903 0.915 0.927 0.952 0.952 0.953 0.953 DEXT ROSV 0.015 0.063 0.165 0.141 0.141 0.215 0.226 0.238 LACT 1.120 1.120 1.120 1.120 1.140 1.140 1.150 1.150 1.150 1.150 0.004 0.003 0.003 0.002 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 1.00 BP ART Medph **************** DATE=12/06/95 35.4 35.5 36.2 36.6 36.9 36.9 36.9 37.0 37.0 37.0 37.0 AIR -1.00 -0.75 -0.25 REL-TIME FLAPN0=2604 ACTL TIME

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

:			:																		;		
0 0 0 0 0 0	CUM	5.04 5.40		CUM	0.01	0.21	0.54	0.71	1.36	1.67	7.97	2.54	2.79	. o.	3.66	3.67	3.87	4.08	4.37	4.65		CUM GLUC	0.01 0.21 0.36 0.51
NCSU=Yes	GLUC	0.52 0.79 0.74	NCSU=Yes	GLUC UT IL	0.83	0.78	0.69	69.0	0.69	0.63	0.59	0.54	0.49	77.0	0.51	0.42	0.39	0.43	0.56	0.56 0.68	NCSU=Yes	GLUC	0.69 0.80 0.59 0.60
	ADJ RESIS	76.7 72.0 73.0		ADJ RESIS	20.0	1.44	48.7	4.4	48.2	53.5	59.0	82.2	81.3	8.1.8	7.00	87.8	87.8	87.2	86.5	88.1 92.0	MEDVOL=508	ADJ RESIS	45.1 37.4 40.2 41.9 39.4
MEDVOL=512	ADJ	0.99	MEDVOL=475	ADJ FLOW	0.92	0.93	0.92	0.92	0.89	0.92	0.92	0.92	0.91	0.92	0.90	0.93	0.93	0.93	0.92	0.92		ADJ FLOW	1.00 0.99 0.97 0.98 0.98
GROUP=EtOH	VRE- SIST	75.6 71.0 72.0	GROUP=EtOH	VRE- SIST	45.8	40.4	44.6	9.07	44.1	49.0	24.0	75.2	74.4	84.0	82.8	80.4	80.4	8.62	79.5	80.6 84.2	GROUP=No Topical	VRE- SIST	44.1 36.6 39.4 41.0 38.6
	LACT	1.05		LACT	0.15	0.37	0.71	0.81	0.92	0.94	0.97	0.97	0.95	0.89	50.1	0.94	1.06	96.0	0.93	0.83	GROUP=	LACT	0.06 0.26 0.48 0.67
DOSETIME=10:00	DEXT	0.953 0.840 0.850	DOSETIME=10:15	DEXT	0.740	0.757	0.811	0.803	0.852	0.876	0.877	0.893	0.925	0.943	0.976	0.956	0.989	0.929	0.904	0.892	E=10:00	DEXT	0.776 0.771 0.856 0.844 0.835
	LACT	0.229 0.340 0.312		LACT	790.0	0.145	0.244	0.279	0.296	0.300	0.286	0.263	0.237	0.197	0.259	0.195	0.206	0.205	0.257	0.232	DOSETIME=10:00	LACT	0.027 0.102 0.139 0.195
FLAPWT=25.21 :inued)	DEXT	1.170	FLAPWT=29.72	DEXT	1.150	1.140	1.150	1.140	1.180	1.190	1.170	1.160	1.170	1.160	1,160	1.160	1.180	1.140	1.180	1.170	FLAPWT=28.55	DEXT	1.100 1.150 1.140 1.130
PHASE=2 FLAPWT (continued)	LACT	0.002 0.002 0.001		LACT	0.004	0.005	0.004	0.005	0.004	0.005	0.003	0.003	0.005	0.003	0.00	0.003	0.003	0.002	0.000	0.002		LACT	0.006 0.005 0.004 0.004
	MEAN	1.00	-R PHASE=2	MEAN				1.01	2.01	1.00	8 8	1.01	1.00	9.0	0.00	1.02	1.02	1.02	1.01	. 6	PHASE=1	MEAN	1.02 1.01 0.99 0.99
ANIMAL/SIDE=95-39-15-L	MED	35.4 35.4 35.4	SIDE=95-39-13-R	MED	35.4	55.7	35.7	35.8	35.9	36.0	36.1	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2 36.2	E=95-39-13-L	MED	35.3 35.2 35.2 35.2
/SIDE=9	BP MEAN	228	/SIDE=9	BP	94	14	42	7;	43 53	65	¥ &	92	72	84	2 28	82	82	8	80	8 22 32		BP	45 37 39 41 38
ANIMAL	ART MEDPH	7.4	ANIMAL/	ART MEDPH	7.4	4.7	7.4	7.4	7.4	7.4	4.7	7.4	7.4	7.4	7.7	7.4	7.4	7.4	7.4	7.4	ANIMAL/SID	ART Medph	4.7.7.4.4.7.7.4.7.7.7.7.7.7.7.7.7.7.7.7
56/90/	HUMI	26.0 26.4 27.3	26/20/	HUMI	31.7	35.2	32.4	31.1	32.1	31.5	31.7	28.2	27.7	24.8	9.02	30.3	56.4	32.0	31.4	27.7		HUMI	29.2 32.0 30.7 27.3 29.7
DATE=12/06/95	AIR TEMP	37.0 37.0 37.0	DATE=12/07/95	AIR	35.6	35.9	36.1	35.9	36.0	35.9	35.9	35.9	35.9	35.9	36.1	35.9	36.0	35.9	35.8	36.0 36.0	DATE=12/07/95	AIR TEMP	36.3 36.3 36.5 36.6
	REL- TIME	7.00 7.50 8.00		REL- TIME	-1.00	5.0-	-0.25	0.0	1.00	1.50	2.50	3.00	3.50	0.4	5.00	5.50	9.00	6.50	2.00	8.00		REL- TIME	-1.00 -0.75 -0.50 -0.25 0.00
- FLAPNO=2604	ACTL TIME	17:00 17:30 18:00	- FLAPNO=2605	ACTL TIME			10:00											16:45	17:15	17:45 18:15	FLAPN0=2606	ACTL TIME	9:00 9:15 9:30 9:45 10:00
	TARG	17:00 17:30 18:00		TARG	9:15															17:45 18:15		TARG	9:00 9:15 9:30 9:45 10:00
			- 1																				

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	CUM	0.98 1.29 1.54 1.54 1.54 2.23 3.03 3.23 4.24 4.24 4.24		OLUC CUM	0.01 0.34 0.35 0.89 1.19 1.19 2.71 3.06 3.33 3.33 4.22 4.22 4.22 5.73 6.02
NCSU=Yes	GLUC	0.65 0.62 0.51 0.55 0.35 0.35 0.40 0.40 0.42 0.56	NCSU=Yes	GLUC	2.39 1.30 1.104 1.115 1.115 1.106 0.57 0.57 0.58 0.57 0.57 0.57 0.57 0.57
MEDVOL=508	ADJ RESIS	42.7 43.5 57.1 67.1 70.5 77.8 82.1 73.6 74.8 86.4 86.4	MEDVOL=514	ADJ RESIS	30.4 333.3 333.3 333.3 333.3 333.3 56.3 56.3
	ADJ FLOW	0.98 0.99 0.99 0.99 0.98 0.98 0.98 0.98		ADJ FLOW	0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99
GROUP=No Topical	VRE- SIST	41.8 45.0 46.5 57.0 69.0 70.3 70.9 77.6 80.4 71.6 71.6 71.6 84.6	GROUP=No Topical	VRE- SIST	30.2 33.0 33.0 33.0 33.0 33.0 33.0 54.3 56.0 56.0 56.0 56.0 56.0 56.0 56.0 56.0
GROUP=	LACT	0.86 0.91 1.07 1.07 1.08 1.08 1.03 1.13 0.93 0.93	GROUP=	LACT	0.10 0.45 0.87 0.88 0.98 0.98 1.11 1.11 1.00 0.99 0.99
DOSETIME=10:00	DEXT	0.835 0.874 0.918 0.922 0.946 1.010 0.985 1.010 0.967 1.020 0.972 0.972 0.972	DOSETIME=10:15	DEXT	0.496 0.804 0.825 0.825 0.839 0.839 0.972 1.020 0.991 0.991 0.991 0.991 1.000 1.010
DOSETIM	LACT	0.276 0.272 0.264 0.259 0.259 0.169 0.20 0.200 0.212 0.212 0.212 0.249	DOSETIM	ATEV	0.074 0.170 0.222 0.223 0.293 0.298 0.298 0.171 0.171 0.186 0.165 0.165 0.165
FLAPWT=28.55 continued)	DEXT	1.150 1.170 1.180 1.180 1.150 1.170 1.200 1.170	FLAPWT=16.84	DEXT	1.170 1.170 1.150 1.170 1.170 1.170 1.170 1.170 1.170 1.170
3	LACT	0.004 0.004 0.003 0.003 0.003 0.003 0.004 0.002 0.003 0.003		LACT	0.004 0.003 0.003 0.003 0.003 0.005 0.005 0.005 0.006 0.006
PHASE=1	MEAN	0.98 0.98 0.98 0.98 0.98 0.99 0.99	PHASE=1	MEAN	000000000000000000000000000000000000000
L/SIDE=95-39-13-L	MED	35 35 35 35 35 35 35 35 35 35 35 35 35 3	1L/SIDE=95-39-14-R	MED	35.2 35.2 35.5 35.5 35.5 35.5 35.5 35.5
IDE=95-	BP MEAN	43 47 47 77 72 72 73 73 74 75 75 75 77 77 78 88 83	IDE=95-	BP	255 25 25 25 25 25 25 25 25 25 25 25 25
ANIMAL/S	ART MEDPH	444444444444444	ANIMAL/S	ART	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.
	HUMI DITY	30.1 28.3 28.3 28.5 28.5 28.5 28.5 28.5 28.5 28.5 28.5		HUMI DITY	33.8 33.8 33.3 33.3 33.3 33.3 33.3 33.3
DATE=12/07/95	AIR	35.7 37.0 37.0 37.0 37.1 37.7 37.5 37.5 37.5 37.5 37.5 37.5	DATE=12/13/95	AIR	1.35. 1.
	REL- TIME	8.50 8.50 8.50 8.50 8.50 8.50 8.50		REL- TIME	-1.00 -0.75 -0.75 -0.25
FLAPNO=2606	ACTL TIME	10:30 11:00 12:30 12:30 13:00 14:30 15:30 16:30 17:30 18:00	FLAPNO=2607	ACTL	9:15 9:30 9:30 10:00 10:15 11:15 12:45 13:15 14:15 15:15 17:15 17:15
	TARG	11:30 11:30 12:30 13:00 14:30 15:30 16:30 17:30 17:30 18:30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TARG	2 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

:			:																					:						
	CUM	6.62		CUM	OLUC GLUC	0.0	0.51	2.0	1.05	1.52	1.90	2.24	2.83	3.10	3.37	3.66	5.95	77.4	7.00	5.14	5.38	5.63	2.88		SLUC GLUC	0.01	14	0.56	69.0	1.16
NCSU=Yes	GLUC	99.0	NCSU=Yes	פרחכ	ULIT	2.89	2.0	0.96	1.01	0.95	0.75	0.68	0.64	0.53	0.55	0.57	0.58	7 0	0.77	0.48	0.47	0.51	0.50	NCSU=Yes	GLUC UT I L	0.89	3 2	0.63	0.50	0.48
MEDVOL=514 N	ADJ RESIS	54.8		ADJ	ESIS	35.9	38.6	40.4	37.4	33.0	49.1	54.3	57.7	59.0	6.09	60.2	62.2	64.1	70.0	62.8	63.8	63.5	64.5	MEDVOL=518	ADJ RESIS	61.4	77.7	43.9	46.6	60.4
MEDV	ADJ FLOW R	0.99	MEDVOL=504	ADJ	∝	0.98		0.97					0.97									88	%		ADJ FLOW R	6. c	8	8	6.1	0.99
GROUP=No Topical																								GROUP=No Topical						
=No To	VRE- SIST	54.3	GROUP=EtOH	VRE-	SIST	, i	37.4	30	38	35.	47.	5. 5	2, 2	57.	29.	58	9 2	5	68	61.0	61.9	6	65	=No Tc	VRE- SIST	61	7	43	4 5	60.3
	LACT	0.87		LACT	DEXT	0.05	0.47	0.89	0.95	0.97	9.0	0.0 2.5	0.85	1.01	76.0	0.96	94	78	0.55	1.02	1.01	96.0	0.99		LACT	0.08	20	0.56		0.90
E=10:15	DEXT	0.973	DOSETIME=10:00	DEXT	ROSV	0.242	0.792	0.845	0.828	0.849	0.889	0.936	0.968	0.992	0.982	0.991	0.998	001	0.903	1.010	1.000	0.979	0.982	DOSETIME=10:15	DEXT ROSV	0.747	0.830	0.855	0.918	0.937
DOSETIME=10:15	LACT	0.165		LACT	ATEV	0.045	0.176	0.275	0.309	0.296	0.259	0.206	27.0	0.171	0.169	0.175	0.175	150	0.139	0.154	0.155	0.156	0.159	DOSETIM	LACT	0.032	132	0.160	0.172	0.197
FLAPWT=16.84 continued)	DEXT	1.160	FLAPWT=18.94	DEXT	ROSA	1.150	091.1	1.150	1.150	1.150	1.130	1.150	1.13	1.160	1.160	1.12	1.180	2 2 2	1.150	1.160	1.150	1.140	1.140	FLAPWT=26.34	DEXT	1.140	1.150	1.130	1.140	1.150
3	LACT ATEA	0.003		LACT	ATEA	0.002	200.0	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.003	0.002	0.00	0.004	0.001	0.003	0.002	0.002		LACT	0.002	900	900.0	0.005	0.006
PHASE=1	MEAN	1.00	L PHASE=2	MEAN			70.																	PHASE=1	MEAN					1.00
E=95-39-14-R	MED	36.0	SIDE=95-39-14-L	MED	EM EM	7.75	24.8		55.1	35.7	55.2	2.5	55.3	55.3	35.3	35.4	٠. ۲. د. ۱.	7.55	35.5	35.4	35.5	55.5	55.4	DE=95-35-5-R	MED	36.0	5.5	35.7	35.4	35.7
=95-39	BP EAN	24	10E=9!		-		2 0																	E=95-	BP					3 8
L/SIDE	Œ		ANIMAL/8		Σ																			ANIMAL/SII						
ANIMAL/SID	ART	7.4		ART			7.7																	ANIM	I ART					7.4
	HUMI	32.0	2/13/9	HUMI	110	34.5	32.2	31.6	31.3	20	30	200	30.5	30.0	30	30.	200	20	31.2	30.4	30.5	30.	31.(14/95	HUMI	37.	36	36.	36.	37.4
DATE=12/13/95	AIR	37.6	DATE=12/13/95	AIR	TEMP	35.7	2.05	36.7	36.7	36.5	36.9	37.0	37.0	36.9	37.0	37.1	57.1	37.0	37.5	37.1	37.1	37.1	37.1	DATE=12/14/95	AIR	36.4 4.8	36.9	37.0	37.0	37.1
	REL- TIME	8.00	FLAPNO=2608	REL-	1 ME	 	-0.70	-0.25	0.00	0.50	86	2.0	2.50	3.00	3.50	4.00	0.4 00.0	5.50	9.00	6.50	2.00	7.50	8.00		REL- TIME	 	-0.50	-0.25	0.0	1.00
FLAPNO=2607	ACTL TIME	18:15	- FLAPN	ACTL	I I	9:00	21:0 21:0	9:45	10:00	10:30	11:00	17:50	12:30	13:00	13:30	14:00	14:50	15:30	16:00	16:30	17:00	17:30	18:00	FLAPN0=2609	ACTL TIME	9:15	57:0	10:00	10:15	11:15
	TARG	18:15		TARG	TIME	9:00	51:0 51:0	9:45	10:00	10:30	11:00	17:50	12:30	13:00	13:30	14:00	14:50	15:30	16:00	16:30	17:00	17:30	18:00		TARG TIME	9:15	9:45	10:00	10:15	11:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FLAPNO=2609		DATE=12/14/95	14/95	ANIMAL/S	MAL/SIDE=95-35-5-R	-35-5-R	PHASE=1	FLAPWT=26.34 (continued)	f=26.34 led)	DOSETIME=10:15	E=10:15	GROUP=No Topical	Topice		MEDVOL=518	NCSU=Yes	
TARG	ACTL	REL- TIME	AIR	HUMI	ART	BP MEAN	MED	MEAN	LACT	DEXT	LACT	DEXT	LACT	VRE- SIST	ADJ	ADJ RESIS	GLUC	SLUC CUM GLUC
11:45	11:45	1.50	37.1 37.2	38.3	7.4	69 22	35.7	1.00	0.007	1.150	0.217	0.921	0.92	69.3	1.01	69.5	0.52	1.42
12:45	12:45	2.50	37.2	39.8	7.4	87	35.8	1.00	0.007	1.160	0.200	0.936	0.86	78.4	0.99	78.5 88.5	0.51	1.90 2.14
13:45	13:45	3.50	37.2	39.9	7.4	8 8	35.8	0.99	0.005	1.150	0.193	0.942	0.90	84.8	1.00	85.0 82.2	0.47	2.37
14:45	14:45	4.50	37.3	39.7	7.4	1 2 8	35.9	88	0.004	1.170	0.204	0.960	0.95	81.0	1.00	81.2	0.48	3.06
15:45	15:45	5.50	37.3	38.7	7.4	4:	35.9	1.02	0.001	1.190	0.194	0.978	0.91	75.5	1.02	75.6	67.0	3.31
16:15	16:15	6.00	37.3	38.1	7.7	69	35.9 35.8	2.0	0.003	1.19	0.190	0.988	0.93	66.7 69.0	88	66.8 69.1	0.46 0.45	3.54
17:15	17:15	7.00	37.2	36.9	7.4	89	35.9	1.01	0.003	1.190	0.272	0.944	1.09	7.79	1.00	8.79	0.56	4.04
17:45	17:45	7.50	37.3	36.6	7.4	89	35.8	1.01	0.003	1.170	0.269	0.910	1.02	67.3	1.01	67.5	0.60	4.34
18:15	18:15	8.00	37.2	36.3	7.4	62	35.8	9.0	0.005	1.180	0.253	0.902	0.89	62.0	0.0	62.1	0.63	99.4

MEDVOL=510 NCSU=Yes 98.2 55.77 67.55 70.34 70.35 7 ADJ RESIS ADJ FLOW DATE=12/14/95 ANIMAL/SIDE=95-35-5-L PHASE=2 FLAPWT=26.82 DOSETIME=10:00 GROUP=ETOH LACT 0.741 0.775 0.840 0.877 0.898 0.969 0.966 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 DEXT ROSV 0.024 0.089 0.152 0.147 0.189 0.187 0.197 0.187 0.187 0.187 0.187 0.187 0.183 0.183 LACT 1.090 1.150 1.150 1.170 1.170 1.180 1.180 1.180 1.180 1.190 1.190 1.190 DEXT 0.005 0.005 0.006 0.006 0.006 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 LACT MEAN MED TEMP BP MEAN 66823367426736868873676868 ART MEDPH 386.7 336.5 337.2 337.2 337.2 337.2 337.3 337.3 337.3 337.3 337.3 337.3 337.3 337.3 337.3 337.3 337.3 337.3 ------ FLAPNO=2610 -1.00 -0.75 -0.50 REL-TIME

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	MUS	GLUC	0.01	0.22	0.41	0.58	0.75	1.09	1.32	1.57	1.80	5.06	2.30	2.53	2.77	3.01	3.22	3.43	3.63	3.83	4.08	4.38	4.38
NCSU=Yes	פרחכ	UTIL	0.87	0.84	92.0	0.70	29.0	69.0	97.0	0.49	27.0	0.52	0.48	97.0	97.0	0.48	0.43	0.43	0.40	0.39	0.50	09.0	
MEDVOL=488	ADJ	RESIS	102.1	51.0	7.74	43.6	42.1	41.0	50.2	56.9	52.6	57.5	8,49	63.1	64.1	69.1	73.1	73.4	77.3	78.3	67.3	64.1	,
_	ADJ	FL04	0.93	0.92	0.95	76.0	0.95	0.93	0.94	0.93	0.93	0.92	0.93	0.94	76.0	0.94	0.93	0.94	0.93	0.94	0.94	0.94	
Topica	VRE-	SIST	0.96	78.0	9.44	41.0	39.6	38.6	47.2	53.5	49.5	54.1	6.09	59.3	60.3	65.0	68.7	69.0	72.7	73.6	63.3	60.3	•
GROUP=No Topical	LACT	DEXT	0.08	0.30	0.48	69.0	0.78	0.91	1.00	1.01	1.06	9.0	1.01	1.02	1.00	0.91	0.99	1.04	1.01	1.03	1.07	1.07	1.29
=10:30	DEXT	ROSV	0.709	0.727	0.778	0.801	0.828	0.812	0.920	0.894	0.903	0.898	0.905	0.908	0.918	0.911	0.921	0.925	0.945	946	0.900	0.845	0.727
DOSETIME=10:30	LACT	ATEV	0.037	0.120	0.167	0.221	0.236	0.292	0.214	0.232	0.232	0.230	0.231	0.222	0.215	0.204	0.202	0.208	0.190	0.188	0.251	0.299	0.499
=27.42	DEXT	ROSA	1.110	1.120	1.120	1.120	1.130	1.130	1.130	1,120	1.120	1.140	1.130	1.120	1.130	1.130	1.120	1.120	1.130	1.120	1.130	1.120	1.110
FLAPWT=27.42	LACT	ATEA	0.003	0.003	0.003	0.002	0.001	0.003	0.004	0.003	0.003	0.003	0.003	900.0	0.004	0.005	0.005	900.0	0.004	0.007	0.005	0.005	0.005
PHASE=1	MEAN	FLOW	0.99	0.98	1.01	9.1	1.01	0.99	1.00	0.99	0.99	0.98	0.99	1.00	1.00	1.00	0.99	0.0	0.99	1.01	9.1	1.00	
-45-6-R	MED	TEMP	33.8	34.4	35.4	35.6	35.7	35.7	35.8	35.8	35.9	35.9	35.8	35.9	35.9	36.1	36.0	36.0	36.0	36.0	35.9	35.9	37.3
/SIDE=96-45-6-R	8	MEAN	95	25	45	41	40	38	25	23	65	23	9	26	9	65	89	69	22	7.	63	9	•
ANIMAL/S	ART	MEDPH	7.4	7.4	7.4	4.7	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.4	7.4
	HUMI	DITY	34.1	34.3	33.2	31.6	35.0	32.5	59.6	31.9	34.6	32.4	32.0	34.0	34.2	33.6	34.0	33.1	•	•	•	٠	,
TE=01/1	AIR	TEA P	35.3	34.4	34.9	35.4	35.4	35.5	35.5	35.6	35.5	35.6	35.5	35.5	35.6	35.6	35.6	35.6	35.5	35.4	35.4	35.4	35.2
611 DA	REL-	TIME	-1.00	-0.75	-0.50	-0.25	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	9.00	6.50	2.00	7.50	8.00
FLAPNO=2611 DATE=01/11/96	ACTL	## # #	9:30	6:45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	TIME	9:30	6:45	10:00	10:15	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

	CU	OLUC	0.01	0.16	0.28	0.39	0.52	0.77	1.06	1.35	1.62	1.88	2.15	2.41	5.69	2.95	3.20	3.41	
NCSU=Yes .	GLUC	UTIL	1.23	09.0	0.49	0.45	0.51	0.49	0.58	0.59	0.55	0.50	0.54	0.52	0.56	0.52	0.51	0.41	
=483	ADJ	RESIS	37.6	32.7	33.8	38.9	30.5	28.4	29.0	28.9	29.5	30.7	29.3	30.4	29.9	30.9	32.2	32.7	
MEDVOL=483	ADJ	FLOW	0.93	0.92	0.92	0.93	0.93	0.92	0.93	0.94	0.93	0.91	0.92	0.92	0.94	0.94	0.93	0.92	
GROUP=EtOH	VRE-	SIST	35.0	30.5	31.5	36.2	28.1	56.4	27.0	26.9	27.1	28.6	27.3	28.3	27.9	28.7	30.0	30.5	
_	LACT	DEXT	0.05	0.33	09.0	0.82	0.88	96.0	0.94	1.02	1.00	1.02	1.00	1.03	96.0	0.98	96.0	1.08	
DOSETIME=10:15	DEXT	ROSV	0.583	0.833	0.894	0.901	0.886	0.891	0.868	0.862	0.869	0.895	0.882	0.889	0.885	0.903	0.898	0.949	
_	LACT	ATEV	0.031	0.091	0.131	0.167	0.201	0.213	0.239	0.266	0.244	0.232	0.241	0.241	0.238	0.226	0.217	0.199	
FLAPWT=26.29	DEXT	ROSA	1.120	1.100	1.110	1.100	1.110	1.110	1.120	1.120	1.110	1.120	1.120	1.120	1.130	1.130	1.120	1.130	
PHASE=2 FL/	LACT	ATEA	0.003	0.002	0.002	0.003	0.003	0.003	0.001	0.002	0.003	0.003	0.003	0.003	0.003	0.004	0.003	0.003	
	MEAN	FLOW	1.00	0.99	0.99	1.00	1.00	0.99	00.1	1.01	9.	0.98	0.99	0.9	1.01	1.01	9.	0.99	
ANIMAL/SIDE=96-45-6-1	MED	TEMP	34.8	35.2	35.3	35.6	35.7	35.7	35.6	35.6	35.8	35.8	35.7	35.6	35.6	35.5	35.6	35.7	
AL/SIDE	86	MEAN	35	30	31	36	82	56	27	22	27	58	27	82	82	62	30	30	
	ART	MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	
DATE=01/11/96	HUMI	DITY	31.4	31.0	28.5	26.7	27.0	27.2	59.6	29.1	29.0	26.8	26.5	29.5	29.7	29.3	30.0	29.6	
DATE=(AIR	TEMP	36.0	36.7	36.9	37.1	36.7	36.7	37.3	37.4	37.5	37.5	37.0	37.4	37.4	37.4	37.5	37.4	
FLAPNO=2612	REL-	TIME	-1.00	-0.75	-0.50	-0.25	0.00	0.50	1.00	1.50	5.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	
FLAP	ACTL	TIME	9:15	9:30	9:45	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	
	TARG	TIME	9:15	9:30	9:45	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

									:		
	CUM	3.59 3.80 3.96 4.15 4.28		CUM	0.01 0.09 0.20 0.34	0.46 0.73 1.02 1.34	1.62 1.93 2.23 2.53	3.02 3.24 3.58 3.58	•	CUM	0.01 0.18 0.29
NCSU=Yes	GLUC	0.37 0.41 0.33 0.37 0.26	NCSU=Yes	GLUC	0.62 0.31 0.43 0.56	0.48 0.55 0.59	0.56	0.48 0.43 0.37 0.28	~	GLUC	0.69
	ADJ RESIS	33.1 34.2 34.8 34.9		ADJ RESIS	49.0 34.2 29.3	31.5 29.0 32.3 31.5	35.1 37.7 42.6 43.9	43.9 44.1 44.1 44.1	12 33.0 09 35.7 MEDVOL=511	ADJ RESIS	52.3 35.1 33.0
MEDVOL=483	ADJ FLOW	0.94 0.94 0.95 0.95	MEDVOL=573	ADJ FLOW	1.08	1.08	1.1.1.1	00111000		ADJ FLOW	0.97 0.97 0.97
GROUP=E tOH	VRE- SIST	30.8 30.8 31.8 32.4	GROUP=E tOH	VRE- SIST	54.1 37.8 32.3 33.3	34.8 32.0 35.7 34.8	38.8 41.6 47.0 48.5	48.7 48.7 48.7 48.7	1.10 36.5 1 1.90 39.4 1 GROUP=No Topical	VRE- SIST	51.5 34.5 32.5
	LACT	1.11 0.94 1.09 0.98 1.30		LACT	0.25 0.64 0.83 0.87	0.98 0.98 1.04 0.99	20.03 20.03 20.03 20.03	0.98	1.10 1.90 GROUP	LACT	0.07 0.26 0.77
DOSETIME=10:15	DEXT ROSV	0.958 0.951 0.974 0.962 0.996	DOSETIME=10:45	DEXT ROSV	0.879 1.010 0.962 0.920	0.956 0.939 0.901 0.900	0.935 0.903 0.919 0.920	0.985 1.000 1.020	1.090 1.100 ==10:15	DEXT	0.810 0.835 0.930
	LACT	0.186 0.171 0.163 0.159 0.153		LACT	0.064 0.080 0.144 0.188	0.168 0.210 0.241 0.241	0.205 0.227 0.218 0.220	0.158 0.158 0.120 0.113	0.060 1.000 0.060 1.100 DOSETIME=10:15	LACT	0.024 0.080 0.156
FLAPWT=26.29 tinued)	DEXT	1.120 1.120 1.120 1.110	FLAPWT=22.99	DEXT	1.120	1.140 1.150 1.130 1.140	1.150	1.150	004 1.150 004 1.150 003 1.130 FLAPWT=26.68	DEXT	1.120
PHASE=2 FLAPWT (continued)	LACT	0.006 0.002 0.004 0.004 0.005		LACT	0.004 0.003 0.004 0.005	0.003 0.003 0.003 0.004	0.002	0.000		LACT	0.003
	MEAN	1.01	7-R PHA	MEAN	0.98	1.00	2.688	96.5.5.6.6	1.02 0.99 PHASE=1	MEAN	0.99
SIDE=96-45-6-L	MED	35.4 35.4 35.4 35.4	SIDE=96-45-7-R PHASE=2	MED	35.5 36.2 35.6 35.9	35.7 35.7 35.8 35.9	35.93		37 36.2 39 36.2 DE=96-47-7-R	MED	35.2 35.1 35.3
AL/SIDE	BP MEAN	33 33 33		BP	37 23 33 33 33 33 33 33 33 33 33 33 33 33	33233	75 75 75 75 75 75 75 75 75 75 75 75 75 7	78 8 2 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		BP MEAN	32 34
ANIM,	ART	7.4	ANIMAL/	ART MEDPH	4.7.7.4.4.4.4	7.4 7.4 7.7	4444		7.4 7.4 7.4 ANIMAL/SI	ART Medph	7.4 7.4 7.4
DATE=01/11/96 ANIMAL/	HUMI	26.5 28.5 29.0 29.2 27.0	DATE=01/17/96	HUMI	35.3 35.4 34.7 34.0	34.0 33.7 33.8 34.0	34.3	34.23.4	+	HUMI	38.5 36.8 36.1
DATE=0	AIR	37.4 37.3 37.3 37.3	DATE=0	AIR	37.3 37.8 37.4 37.7	37.6 37.8 37.8 37.7	37.8 37.9 37.8 37.3	37.6 37.6 37.9	38.1 33.0 38.1 34.0 DATE=01/18/96	AIR	36.6 36.7 37.1
FLAPNO=2612	REL- TIME	6.00 6.50 7.00 7.50 8.00	FLAPNO=2613	REL- TIME	-1.00 -0.75 -0.50	0.00 0.50 1.00	3.50		4 12 12 4 12 12 12 12 12 12 12 12 12 12 12 12 12	REL- TIME	-1.00 -0.75 -0.50
FLAP	ACTL TIME	16:15 16:45 17:15 17:45 18:15	FLAP	ACTL TIME	9:45 10:00 10:15	10:45 11:15 11:45 12:15	12:45 13:45 14:15	15:15 16:15 17:15	16:45 7.9 18:45 8.0 18:45 8.0	ACTL TIME	9:15 9:30 9:45
	TARG	16:15 16:45 17:15 17:45 18:15		TARG				15:15 16:15 17:15		TARG	9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

1	SLUC GLUC	0.42	0.3	1.15	55.	1.75	1.90	2.00	2.22	2.32	2.41	2.50	2.62	2.73	2.84
NCSU=Yes	GLUC	0.52	0.41	0.38	0.40	0.39	0.30	0.20	0.5	0.20	0.18	0.18	0.22	0.22	0.22
MEDVOL=511	ADJ RESIS	29.6	30.9	31.6	35.5	33.9	42.7	32.5	38.2	37.8	38.0	36.0	37.8	37.6	36.6
	ADJ FLOW	0.98	0.98	0.98	0.98	26.0	0.96	0.98	98	0.98	0.97	1.00	0.98	0.98	0.98
GROUP=No Topical	VRE- SIST	29.1	24.0 30.5	31.2	35.0	33.3	42.1	32.0	37.6	37.2	37.4	35.5	37.2	37.0	36.0
GROUP=N	LACT	0.63	1.01	0.94	0.96	0.00	1.10	1.33	1.02	1.04	1.18	1.13	0.93	1.05	1.01
DOSETIME=10:15	DEXT	0.918	0.946	0.971	0.951	0.964	0.995	1.040	1.040	1.050	1.060	1.050	1.040	1.030	1.020
DOSETIN	LACT	0.148	0.178	0.165	0.186	0.164	0.153	0.126	0.118	0.097	0.097	0.092	0.094	0.106	0.102
FLAPWT=26.68 continued)	DEXT	1.150	1.130	1.140	1.140	1.140	1.130	1.130	1.130	1.140	1.140	1.130	1.140	1.130	1.120
_ ~	LACT	0.003	0.005	900.0	0.002	0.005	0.004	0.006	0.00	0.003	0.003	0.002	0.001	0.001	0.001
PHASE=	MEAN	1.00	0.9	0.0	1.03	0.99	0.98	9.0	1.00	1.00	0.99	1.02	1.00	1.00	1.00
MAL/SIDE=96-47-7-R	MED	35.5 35.2	35.3 35.2	35.3	35.5	35.6	35.7	35.9	35.8	36.1	35.8	35.9	36.2	35.7	36.3
SIDE=9	BP MEAN	8,3	30 54	3.	32 20	33	41	32	38 5	37	37	36	37	37	36
ANIMAL/	ART Medph	7.4													
18/96	HUMI	35.6	35.9	35.9	35.0	35.8	35.7	35.9	35.7	35.6	34.8	35.0	35.4	36.3	35.8
DATE=01/18/96	AIR	36.9													
	REL- TIME	-0.25	0.50	1.50	2.50	3.00	3.50	4-00	2. r	5.50	9.00	6.50	7.00	7.50	8.00
FLAPN0=2615	ACTL TIME	10:00	10:45	11:45	12:45	13:15	13:45	14:15	15:15	15:45	16:15	16:45	17:15	17:45	18:15
	TARG	10:00	10:45 11:15	11:45	12:45	13:15	13:45	14:15	15:15	15:45	16:15	16:45	17:15	17:45	18:15

0.00 0.20 0.30 0.44 0.55 0.55 1.18 1.18 1.18 1.28 2.25 2.25 2.25 2.25 3.38 3.38 MEDVOL=524 NCSU=Yes ADJ RESIS GROUP=E tOH 0.10 0.27 0.27 0.48 0.48 0.97 1.00 1.05 1.05 0.95 0.95 0.98 LACT DOSETIME=9:59 0.574 0.806 0.925 0.927 0.927 0.927 0.927 0.935 0.935 0.947 0.941 LACT 0.055 0.091 0.091 0.116 0.177 0.172 0.173 0.173 0.238 FLAPWT=26.52 1.110 1.130 1.130 1.140 1.140 1.140 1.140 1.140 1.140 DEXT 0.002 0.004 0.005 0.003 0.005 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 ANIMAL/SIDE=96-47-7-L PHASE=2 MEAN 33.9 34.9 35.0 335.0 335.0 335.6 335 BP MEAN ART Medph DATE=01/18/96 FLAPN0=2616 REL-TIME -0.98 -0.73 -0.73 -0.68 -0.09 -0.09 -0.09 -0.09 -0.09 -0.09 -0.53

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

			•					;	
	OUN CUM	3.59	: : : : : : :	OU10 OUM	0.01 0.20 0.32 0.41 0.60	0.84 1.00 1.11 1.26 1.52	1.67 1.75 1.88 2.00 2.21 2.33	eruc CUM	0.01 0.19 0.36 0.47
NCSU=Yes	GLUC UT1L	0.42 0.40 0.31	NCSU=Yes	GLUC	1.16 0.78 0.39 0.22 0.22	0.24 0.31 0.30 0.30 0.22	0.30 0.17 0.25 0.25 0.19 0.14	NCSU=Yes - GLUC UTIL	0.93 0.71 0.68 0.43 0.39
	ADJ RESIS	40.8 42.6 52.0	MEDVOL=516	ADJ RESIS	34.9 34.9 34.9 36.2 33.5	36.9 36.8 39.4 41.9 43.0	46.2 48.6 50.0 50.3 53.6 55.1	10	55.7 33.6 31.9 34.4 30.3
MEDVOL=524	ADJ FLOW	1.00		ADJ	0.99 0.99 0.99 0.99	0.97 0.99 0.98 0.98	0.97 1.01 1.00 0.99 0.98 0.98	MEDVOL=566 ADJ ADJ FLOW RESI	1.10
GROUP=E tOH	VRE- SIST	41.2 43.0 52.5	GROUP=No Topical	VRE- SIST	40.2 34.8 34.7 34.0 35.2 33.3	36.7 36.6 39.2 39.0 41.6	45.9 48.3 49.8 51.3 53.3 62.0	GROUP=EtOH :T VRE- :T SIST	60.7 36.6 34.8 37.6 33.0
	LACT	0.98	GROUP=I	LACT	0.08 0.15 0.41 0.60 1.10	1.16	1.22 1.38 1.38 1.76 1.69 1.39	U X	0.05 0.24 0.35 0.55
DOSETIME=9:59	DEXT	0.952 0.951 0.992	E=10:15	DEXT	0.728 0.859 0.976 0.995 1.040 1.060	1.050 1.040 1.060 1.030 1.030	1.030 1.080 1.060 1.060 1.060 1.060	DOSETIME=10:00 ACT DEXT LA TEV ROSV DE	0.735 0.871 0.901 0.996
	LACT	0.189 0.173 0.136	DOSETIME=10:15	LACT	0.036 0.044 0.055 0.062 0.070 0.089	0.108 0.123 0.100 0.122 0.133	0.138 0.096 0.127 0.129 0.122 0.127	76 DOSE LACT ATEV	0.020 0.070 0.096 0.098 0.110
SIDE=96-47-7-L PHASE=2 FLAPWT=26.52 (continued)	DEXT	1.140 1.130 1.130	FLAPWT=21.77	DEXT	1.150 1.140 1.140 1.150 1.150	1.140 1.140 1.140 1.140	1.140 1.140 1.150 1.150 1.150	FLAPWT=23.76 DEXT LAROSA A	1.100 1.150 1.170 1.150
E=2 FLAPWT (continued)	LACT	0.004		LACT	0.003 0.003 0.004 0.004 0.004	0.004 0.007 0.005 0.006 0.003	0.004 0.005 0.003 0.005 0.002 0.004 0.002	PHASE=2 FL/ AN LACT DW ATEA	0.002 0.003 0.002 0.003
-L PHAS	MEAN	1.00	PHASE=1	MEAN	0.1.0 1.00 1.00 1.00 1.00 1.00	0.98 1.00 1.00 0.99	0.98 1.00 1.00 1.00 1.00		1.01
-96-47-7	MED	35.7 35.7 35.4	=96-50-10-R	MED	35.1 35.2 35.4 35.6 35.6	35.5 35.5 35.5 35.3 4.3 5.3 5.3	35.3 35.7 35.7 35.9 35.9	ANIMAL/SIDE=96-50-10-L ART BP MED ME EDPH MEAN TEMP FL	35.1 35.3 35.3 35.3
AL/SIDE	BP	41 52	-96=301	BP MEAN	3344432	43 43 43 43 43 43 43 43 43 43 43 43 43 4	45 49 51 51 62 62	L/SIDE= BP MEAN	61 37 35 33
ANIM	ART MEDPH	7.4	ANIMAL/SIDE	ART MEDPH	4444444	444444	44444444	ANIMA ART MEDPH	4.7 4.7 4.7 7.4 7.7
DATE=01/18/96 ANIMAL/	HUMI DITY	38.6 39.1 39.8		HUMI	35.6 35.7 34.6 33.9 32.9	32.6 31.6 32.7 32.9 32.1 32.1	32.5 30.3 32.3 32.3 33.0 33.1	DATE=01/24/96 AIR HUMI TEMP DITY	38.7 35.8 34.2 32.8
DATE=0	AIR	36.5 36.5 36.5	DATE=01/24/96	AIR TEMP	36.5 36.7 36.9 37.1 37.1	37.2 37.2 37.2 37.2 37.2	37.2 37.2 37.2 37.2 37.2 37.2	DATE=0' AIR TEMP	36.0 36.6 37.1 37.0
FLAPN0=2616	REL- TIME	7.02 7.52 8.02		REL- TIME	-1.00 -0.75 -0.50 -0.50 -0.50	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	6.50 6.00 6.00 7.50 8.00	FLAPNO=2618 CTL REL- IME TIME	-1.00 -0.75 -0.50 -0.25 0.00
FLAP	ACTL TIME	17:00 17:30 18:00	FLAPN0=2617	ACTL TIME	9:15 9:30 9:45 10:00 10:45 11:15	11:45 12:15 13:15 14:15	14:45 15:15 16:15 16:15 16:45 17:45 18:15	FLAPN ACTL TIME	9:00 9:15 9:30 9:45 10:00
	TARG	17:00 17:30 18:00		TARG	9:15 9:30 10:00 10:15 10:45	11:45 12:15 12:45 13:15 14:15	14:45 15:15 16:15 16:15 17:15 17:45 18:15	TARG	9:00 9:15 9:30 9:45 10:00
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TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	GLUG	0.71 1.08 1.07 1.26 1.68 1.47 1.89 2.25 2.25 2.44 3.10	CUM 6
NCSU=Yes -	GLUG UTIL	0.30 0.36 0.42 0.42 0.42 0.43 0.33 0.33 0.33 0.33 0.33 0.33	0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55
	ADJ RESIS		ADJ RESIS 322 31.3 31.3 32.3 34.6 49.7 49.7 49.7 49.7 49.7 49.7 49.7
MEDVOL=566	ADJ FLOW	1.08 31.5 1.10 30.1 1.07 33.5 1.10 34.7 1.07 38.4 1.09 43.3 1.11 47.6 1.10 55.4 1.10 62.6 1.10 62.6 1.10 64.2 1.10 64.2	ADJ FLOW 1.02 1.02 1.03 1.03 1.03 1.03 1.03 1.03
GROUP=EtOH	VRE- SIST	44 34.3 32.8 32.8 34.5 31.8 37.8 47.2 0 46.1 22 55.0 22 55.0 22 55.0 24 60.4 26 60.4 27 56.9 28 70.0 29 67.7 20 67.7 20 67.7 20 67.7 20 67.7 20 67.7 20 67.7 20 67.7 20 67.7	VRE- SIST 33.3 32.0 37.2 37.2 37.2 37.2 37.2 37.2 37.2 37.2
	LACT	000000-00-000-0	LACT 0.39 0.63 0.78 1.03 1.00 0.94 0.98 0.98 1.22 1.22 1.05
DOSETIME=10:00	DEXT	126 1.020 1.164 1.010 1.165 0.983 1.77 0.980 1.77 1.010 1.78 0.974 1.010 1.56 1.010 1.56 1.010 1.55 1.000 1.55 1.55	DEXT ROSV 0.884 0.914 0.914 0.979 0.923 0.934 0.934 0.936 0.927 0.938 1.020 1.030 1.040
	LACT	• • • • • • • • • • • • • • • • • • • •	LACT ATEV 0.093 0.141 0.175 0.0215 0.198 0.198 0.196 0.197 0.118 0.118 0.111
PHASE=2 FLAPWT=23.76 (continued)	DEXT	LAPT = 23.08	DEXT ROSA 1.120 1.130 1.140 1.140 1.150 1.150 1.130 1.130
SE=2 FLAPWT (continued)	LACT	9 0.001 11 0.001 11 0.003 11 0.007 8 0.003 12 0.003 13 0.003 11 0.002 11 0.002 11 0.002 11 0.002 11 0.002 11 0.002 11 0.002	ATEA 0.002 0.003 0.005 0.005 0.005 0.005 0.008 0.008 0.008 0.008 0.008
	MEAN		MEAN FLOW 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
SIDE=96-50-10-L	MED	34 35.1 0.33 35.4 10.33 35.4 10.33 35.4 10.33 35.4 10.35 35.6 10.35 35.2 10.35 35.3 10.3	AED 35.77 TEMP 35.77 35.10 35.13 35.
-	BP MEAN		HEAN 33 33 33 34 4 5 5 5 5 5 5 5 5 5 5 5 5 5
ANIMAL	ART MEDPH	7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4	MEDPH ATT ATT ATT ATT ATT ATT ATT ATT ATT AT
124/96	HUMI	21.9 21.1.2 21.1.2 21.1.2 21.2 21.2 21.3 21.3	HUM 17. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
DATE=01/24/96	AIR	37.2 31.9 37.4 31.1 37.5 31.2 37.6 31.1 37.3 30.6 37.4 30.8 37.1 31.1 37.0 30.5 37.0 28.3 37.0 28.3 37.0 28.3 37.0 28.3 37.0 28.3 37.0 28.3 37.0 28.3	AIR 36.9 36.9 36.9 37.1 37.2 37.2 37.2 37.2 37.2 37.3 37.3 37.3
FLAPN0=2618	REL- TIME	:30 0.50 :30 1.00 :30 1.50 :30 2.50 :30 2.50 :30 4.50 :30 4.50 :30 5.50 :30 5.50 :30 6.50 :30 7.50 :30 7.50	TIME -1.00 -0.75 -0.55 -
FLAPN	ACTL TIME	10:30 11:30 12:00 12:30 13:30 14:00 15:30 16:30 17:30 17:30	ACTL 1 IME 9:15 9:30 9:35 10:00 10:15 11:15 12:45 12:45 13:45 14:45 15:15 16:45 17:45
	TARG	10:30 11:30 11:30 12:30 14:30 14:30 15:30 16:30 16:30 17:30 17:30	1ARG 9:15 9:15 9:15 9:15 11:15 11:15 12:15 12:15 14:15 15:15 16:15 16:15 17:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

:			:																		;			
	SUNG	3.50		OUNC	0.01	0.38	0.56	1.15	1.59	2.05	2.89	3.22	3.55	3.97	4.16	4.36	4.56	10.4	5.05	5.12	1	GLUC	0.01 0.20 0.39 0.59	1.60
NCSU=Yes	פרחכ חדור	0.28	NCSU=Yes	GLUC	0.84	0.68	2.7	0.81	0.88	0.93	0.71	99.0	0.65	0.42	0.39	0.41	0.58	0.36	0.29	0.27	NCSU=Yes	GLUC	0.55 0.77 0.82 0.82	0.80
	ADJ RESIS	45.1	MEDVOL=507	ADJ RESIS	38.1	39.1	36.7	39.1	40.3	44.6	61.4	55.7	8.75 56.4	63.0	61.3	62.1	5.2	60.3	71.3		MEDVOL=463	ADJ RESIS	40.9 42.1 36.8 37.6 35.7	36.4
MEDVOL=530	ADJ FLOW	1.04		ADJ FLOW	0.97	0.97	980	0.97	26.0	0.99	0.98	0.99	6 6	0.95	96.0	0.98	9.6	0.07	0.97	0.98		ADJ FLOW	0.90	0.88
GROUP=EtOH	VRE- SIST	46.1	GROUP=No Topical	VRE- SIST	37.2	38.2	35.8 36.8	38.2	39.4	40.6 43.6	60.0	54.5	55.4	61.5	59.9	60.7	8.1.8	67.7	2 69		GROUP=No Topical	VRE- SIST	36.5 37.6 32.8 33.5	32.5
	LACT	1.31	GROUP	LACT DEXT	0.38	0.82	0.88	0.95	0.94	0.98	0.93	0.95	1.01	1.06	1.06	0.9	20.0	2.5	1.33	96.0	GROUP=	LACT	0.16 0.43 0.69 0.87	1.01
rIME=10:	DEXT	0.974	==10:00	DEXT	0.814	0.890	0.883	0.843	0.815	0.796	0.861	0.892	0.908	0.973	266.0	0.982	1 000	0.995	0.995	1.030	E=10:30	DEXT ROSV	0.908 0.828 0.834 0.800 0.815	0.808
90 DOSE.	LACT	0.149	DOSETIME=10:00	LACT	0.122	0.210	0.232	0.287	0.311	0.336	0.257	0.234	0.215	0.174	0.159	0.157	0.145	0.148	0.150	0.104	DOSETIME=10:30	LACT	0.037 0.137 0.222 0.268 0.296	0.340
FLAPWT=23.06 DOSETIME=10:15 tinued)	DEXT	1.080	FLAPWT=21.86	DEXT	1.120	1.140	1.140	1.140	1.140	1.130	1.120	1.130	1.130	1.130	1.140	1.130	1.120	1.120	1.100	1.130	FLAPWT=24.64	DEXT ROSA	1.130 1.150 1.150 1.150	1.140
PHASE=2 FLAPUT (continued)	LACT	0.010		LACT	0.005	0.006	0.007	0.005	500.0	0.008	0.017	0.00	0.008	0.008	200.0	0.010	0.00	0.00	0.010	0.008		LACT	0.002	0.004
	MEAN	1.02	PHASE=1	MEAN	9.0	.0	5.0	.0	0.99	5.6	1.00	1.01	1.0.	0.98	0.99	1.0	20.	0.0	66.0	1.00	PHASE=1	MEAN	0.99	0.99
ANIMAL/SIDE=96-49-12-R	MED	35.5	ANIMAL/SIDE=96-49-12-L	MED	34.2	34.9	35.9	35.1	35.1	35.1 35.2	35.2	35.1	35.2	35.3	35.3	34.9	5. C	35.0	35.1	35.8	DE=96-46-8-R	MED	35.6 35.6 35.6 35.5	35.7
-/SIDE=	BP	25	.DE=96-	BP MEAN	37	38	3 2	38	39	- 4 - 4	9	22	2,7	8	26	61	S %	t 79	69	•		BP MEAN	22222	32
	ART	7.4	IMAL/S	ART Medph	7.4	7.4	7.4	7.4	7.4	4.7	7.4	7.4	4.7	7.4	7.4	7.4	4.7	7.7	7.4	•	ANIMAL/SI	ART Medph	44444	7.4
125/96	HUMI	32.5		HUMI	31.1	29.0	32.4	28.4	31.8	31.4	31.7	31.5	32.0	31.8	29.1	31.7	30.5	31.0	29.5	30.0		HUMI	31.2 33.7 33.7 32.2	27.8
DATE=01/25/96	AIR	37.3	DATE=01/25/96	AIR	35.7	36.3	36.4	36.7	36.6	36.8 36.8	36.8	36.8	3.0.8	36.8	36.7	36.6	0 ×	36.8	36.8	36.9	DATE=01/31/96	AIR	36.9 36.9 36.9 36.9	36.9
FLAPNO=2619	REL- TIME	8.00		REL- TIME	1.00	-0.50	-0.25	0.50	9.5	2.00	2.50	3.00	5.50 4.00	4.50	2.00	2.50	9.6	2.00	7.50	7.75		REL- TIME	-0.75 -0.75 -0.50 -0.25	1.00
- FLAPN	ACTL TIME	18:15	FLAPN0=2620	ACTL TIME	9:00	9:30	10:00	10:30	11:00	17:50	12:30	13:00	15:50	14:30	15:00	15:30	16:00	17:00	17:30	17:45	FLAPNO=2621	ACTL TIME	9:30 9:45 10:00 10:15 10:30	11:30
9 9 2 8 8 8 5 5	TARG	18:15		TARG	9:00	9:30	10:00	10:30	11:00	11:30	12:30	13:00	15:30	14:30	15:00	15:30	16:00	17:00	17:30	18:00		TARG	9:30 9:45 10:00 10:15 10:16	11:30

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	CUM	2.00	2.75	3.45	3.76	4.12	4.47	4.73	5.05	5.28	5.57	5.83	6.05
NCSU=Yes	GLUC	0.81	0.76	0.68	29.0	0.72	69.0	0.54	0.56	0.53	0.57	0.52	0.44
MEDVOL=463	ADJ RESIS	38.5	0.94	44.0 46.0	46.2	41.3	51.7	51.2	46.2	7.67	50.3	51.0	52.6
	ADJ FLOW	0.88	0.89	0.89	0.89	0.00	0.87	0.88	0.89	0.87	0.87	0.88	0.87
o Topical	VRE- SIST	34.3	41.0	41.0	41.2	36.8	46.2	45.7	41.2	44.1	6.44	45.5	6.94
GROUP=No	LACT	1.03	0.95	0.98	26.0	0.93	96.0	0.99	0.95	0.98	26.0	1.01	1.02
DOSETIME=10:30	DEXT	0.794	0.828	0.862	0.852	0.845	0.840	906.0	0.897	0.915	0.90	0.914	0.935
DOSETIM	LACT	0.354	0.304	0.276	0.278	0.283	0.285	0.232	0.230	0.232	0.241	0.228	0.198
FLAPWT=24.64 (continued)	DEXT	1.130	1.140	1.140	1.130	1.140	1.130	1.130	1.130	1.140	1.140	1.130	1.120
_ ~	LACT	0.007	0.008	0.00	0.007	0.010	0.008	0.010	0.009	0.011	0.00	0.010	0.010
PHASE=	MEAN	1.02	1.00	. 6	1.00	1.01	0.98	0.99	1.00	0.98	0.98	0.99	0.98
IMAL/SIDE=96-46-8-R	MED	35.7	35.8	35.8	35.8	35.8	35.8	35.9	35.9	35.9	35.9	36.0	35.9
SIDE=9	BP	75 04	14	5 t	41	37	42	45	41	43	77	45	94
AN I MAL/	ART	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5
31/96	HUMI	32.2	28.2	31.2	31.7	31.1	32.0	31.2	27.4	26.0	31.7	56.6	30.1
DATE=01/31/96	AIR	36.9	37.0	37.0	37.1	37.0	37.0	37.1	37.1	37.0	37.0	37.1	37.1
	REL- TIME	1.50	2.50	3.50	4.00	4.50	2.00	5.50	6.00	6.50	7.00	7.50	8.00
FLAPN0=2621	ACTL TIME	12:00	13:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
	TARG	12:00	13:00	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30

0.63 0.56 0.56 0.67 0.77 0.77 0.72 0.73 0.73 0.73 0.74 0.64 0.65 0.65 0.65 MEDVOL=574 NCSU=Yes 75.00 ADJ RESIS ADJ FLOW DATE=01/31/96 ANIMAL/SIDE=96-46-8-L PHASE=2 FLAPWT=22.75 DOSETIME=10:15 GROUP=EtOH 51.5 46.00 47.00 47.00 47.00 47.00 47.00 67.00 67.00 67.00 83.00 83.00 84.00 0.38 0.97 0.97 0.97 0.98 0.98 0.98 0.99 0.99 0.99 0.99 LACT 0.873 0.926 0.926 0.875 0.851 0.873 0.874 0.854 0.854 0.854 0.854 0.854 0.854 0.854 0.854 0.854 0.854 0.857 DEXT ROSV 0.094 0.163 0.234 0.276 0.278 0.278 0.278 0.278 0.279 0.278 LACT 11.170 11.170 11.170 11.170 11.170 11.170 11.170 11.170 DEXT 0.003 0.004 0.004 0.005 0.005 0.005 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 LACT MEAN MED TEMP BP MEAN ART MEDPH HUMI AIR TEMP ----- FLAPNO=2622 -1.00 -0.75 -0.75 -0.50 REL-TIME 9:15 9:30 9:30 9:30 10:0 ACTL TIME 9:15 9:30 9:30 9:30 11:11 12:15 12:15 14:1

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	GLUC	0.01 0.19 0.35 0.76 1.23 1.72 1.72 1.72 1.72 1.72 1.72 1.72 1.72	CUM GLUC 0.01 0.05 0.50 0.50 0.50 1.11 1.55 2.99 2.99 3.77 4.10 4.37
NCSU=Yes	GLUC UTIL	1.06 0.67 0.67 0.78 0.98 0.98 1.21 1.21 1.20 1.07 1.07 1.00 0.95 0.95	GLUC UTIL 0.61 0.63 0.63 0.78 0.78 0.85 0.98 1.07 1.07 0.65 0.65 0.65
MEDVOL=534	ADJ RESIS	98.6 44.0 41.7 40.0 38.9 38.9 37.1 37.1 55.9 55.9 60.6 61.0	
	ADJ FLOW	1.03 1.02 1.02 1.03 1.03 1.03 1.04 1.05 1.05 1.03 1.03	ADJ ADJ FLOW RESIS O.96 42.6 0.97 36.2 0.96 34.2 0.97 35.2 0.97 35.2 0.97 35.2 0.97 35.2 0.97 35.2 0.97 35.2 0.97 35.2 0.97 52.5 0.97 52
GROUP≕No Topical	VRE- SIST	101.5 53.2 42.9 42.9 40.0 40.0 40.0 40.0 60.9 60.9 65.3	GROUP=ETOH ST VRE- TT SIST ST 41.0 ST 41.0 ST 529.7 ST 29.1
GROUP=)	LACT	0.38 0.78 1.02 1.03 0.98 0.99 0.99 0.99 0.95 0.95 0.95	
DOSETIME=10:15	DEXT ROSV	0.759 0.902 0.907 0.833 0.833 0.754 0.778 0.778 0.778 0.778 0.778 0.778 0.778 0.778 0.778 0.778 0.778	NCT DEXT LA FEV ROSV DE FO 0.905 0. 151 0.914 0. 151 0.914 0. 151 0.914 0. 153 0.869 1. 153 0.869 1. 154 0.85 1. 155 0.860 0. 155 0.860 0. 155 0.855 0.
DOSETIM	LACT	0.136 0.173 0.222 0.222 0.300 0.314 0.375 0.376 0.375 0.376 0.322 0.322 0.327 0.321 0.321 0.321 0.321 0.321 0.321	
FLAPWT=19.93	DEXT	1.120 1.120 1.120 1.120 1.130 1.130 1.130 1.120 1.120 1.120 1.120 1.120 1.120 1.120	PEXT PEXT PEXT PEXT PEXT PEXT PEXT PEXT
	LACT	0.004 0.005 0.005 0.005 0.005 0.008 0.008 0.009 0.012 0.012 0.010 0.010 0.008	AN LACT ON ATEA ON O.005 ON O.005 ON O.005 ON O.005 ON O.006 ON O.
PHASE=1	MEAN	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	
DE=96-51-5-R	MED	8 2 7	KSIDE=96-51-5-L BP MED
-	BP	102 24 24 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26	
ANIMAL/S	ART Medph	44444444444444444	ANIMAI ART MEDPH P 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4
	HUMI DITY	23.0.9 27.1.1 27.1 27	AIR HUMI TEMP DITY 35.0 29.3 36.0 26.0 36.1 29.9 36.4 29.7 36.7 28.0 36.7 28.0 37.0 30.5 37.0 30.0 37.0 32.0 37.0 32.0 37.0 29.6 37.0 29.6 37.0 29.6 37.0 29.6 37.0 29.6 37.0 29.6
DATE=02/01/96	AIR TEMP	%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%	AIR AIR 35.0 36.1 36.1 36.2 36.2 37.0 37.0 37.0 37.0 37.0
	REL- TIME	-1.02 -0.75 -0.25	- FLAPNO=2624 ACTL REL- TIME TIME 9:00 -1.00 9:15 -0.75 9:30 -0.25 0:00 0.00 0:30 0.50 1:30 1.50 1:30 2.50 2:30 2.50 2:30 2.50 3:30 3.50 4:00 4.50 4:30 4.50 5:30 5.50
FLAPN0=2623	ACTL TIME	2.8.2.2.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	ACTL TIME 11 ME 11
	TARG	9.99 9.10 10.00 10	1 ARG 1 1 ME 9:50 9:50 10:00 11:30 12:30 13:00 14:00 15:00 15:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKROOT BSA

	OLUC CUM	5.26 5.51 5.81 6.17 6.50		OLUC CUM	0.00 0.55 0.70 0.70 0.70 0.88 1.72 2.49 3.49 3.49 4.45 5.68 5.26	OLUC CUM	0.01 0.14 0.28
NCSU=Yes	GLUC UTIL 6	0.58 0.51 0.60 0.71 0.67	NCSU=Yes	GLUC	1.04 1.03 0.94 0.84 0.82 0.73 0.74 0.74 0.67 0.61 0.61 0.61 0.64 0.64 0.64 0.64 0.64 0.64 0.64 0.64	GLUC	0.56
	ADJ RESIS	72.5 66.9 68.0 72.4 70.7	MEDVOL=439 N	ADJ RESIS	86 66.4 86 61.7 84 61.8 88 51.8 88 52.6 88 52.6 88 56.4 88 56.4 88 56.4 88 56.4 88 56.4 88 56.9 88 66.9 88 66.9 88 66.9 88 66.9 88 66.9 88 66.9	ADJ RESIS	70.2 56.3 52.3
MEDVOL=499	ADJ FLOW	0.95 0.97 0.98 0.98	MEDVC	ADJ FLOW		ADJ FLOW	1.07
GROUP=EtOH	VRE- SIST	69.7 64.4 65.3 69.6 68.0	GROUP=3 mg HD	VRE- SIST	10 77.4 36 55.2 76 52.3 76 52.3 76 52.3 84 47.7 91 44.3 91 45.9 93 45.6 95 48.2 95 48.2 96 47.7 97 47.0 98 55.0 98 55.0 99 66.3 99 66.3 99 66.3 99 66.3	VRE- SIST	75.8 60.7 56.4
	LACT	0.96 1.23 1.00 0.86 0.94		LACT		LACT	0.31 0.53 0.78
DOSETIME=10:00	DEXT	0.893 0.932 0.912 0.875 0.878	DOSETIME=9:58	DEXT	161 0.732 (161 0.734 (161 0.734 (1724 (173	DEXT ROSV	0.811 0.858 0.867
	LACT	0.219 0.237 0.226 0.232 0.238		LACT		LACT	0.102 0.150 0.206
FLAPWT=21.06 :inued)	DEXT	1.100 1.110 1.120 1.120	FLAPWT=25.75	DEXT	1.180 1.160 1.160 1.170 1.	DEXT	1.140
PHASE=2 FLAPWT (continued)	LACT	0.020 0.018 0.019 0.021		LACT		LACT	0.000
	MEAN	1.01 1.01 1.02 1.02	L PHASE=2	MEAN	1.02 0.00 0.00 0.00 0.00 0.00 0.00 0.00	MEAN	1.01
SIDE=96-51-5-L	MED	35.8 35.8 35.8 35.8	IDE=96-128-5-L	MED	7.4 77 34.5 7.4 57 35.4 7.4 53 35.6 7.4 46 35.6 7.4 47 35.6 7.4 47 35.9 7.4 47 35.9 7.4 47 35.9 7.4 47 35.9 7.4 47 35.9 7.4 47 35.9 7.4 67 35.9 7.4 67 35.9 7.4 67 35.9 7.4 67 35.9 7.4 69 36.2 7.4 69 36.2 7.4 69 36.2 7.4 69 36.2 7.4 69 36.2	MED	35.1 34.8 34.6
	BP	69 65 77 69		BP MEAN	77 57 53 53 55 64 67 67 67 68 69 69	BP MEAN	57 57
ANIM	ART MEDPH	7.77.4.7.7.4.7.7.4.7.7.4.7.7.7.7.7.7.7.	ANIMAL/S	ART MEDPH	7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4	ART MEDPH	7.4 7.4 7.4
2/01/96	HUMI	29.9 29.5 24.6 27.8 30.1	96/20	HUM1 DITY	33.3 35.5 36.0 36.0 37.7 37.7 33.3 33.3 33.3 33.3 33.3 33	HUMI DITY	40.2 40.3 39.5
DATE=02/01/96 ANIMAL/	AIR	37.1 37.0 37.1 37.0 37.1	DATE=02/07/96	AIR	35.3 33.3 36.5 36.5 36.5 36.7 34.4 36.7 34.1 37.0 34.0 37.1 33.3 37.1 33.3 37.1 33.3 37.1 33.3 37.2 34.2 37.2 33.8 37.2 33.8 37.2 33.8 37.2 33.8 37.3 33.9 37.3 33.9 37.3 33.9 37.3 33.9	AIR TEMP	35.8 35.6 35.2
FLAPNO=2624	REL- TIME	6.00 6.50 7.00 7.50 8.00		REL- TIME	~ n ~ n c n n n n n n n n n n n n n n n	REL- TIME	-1.00 -0.77 -0.50
FLAP	ACTL TIME	16:00 16:30 17:00 17:30 18:00	. FLAPNO=2626	ACTL TIME	9:00 -0.99;14 -0.75 9:14 -0.75 9:14 -0.75 9:14 9:15 9:15 9:15 9:15 9:15 9:15 9:15 9:15	ACTL TIME	9:15 9:29 9:45
	TARG	16:00 16:30 17:00 17:30 18:00		TARG	9:00 9:15 9:45 10:00 11:30 11:30 12:30 14:00 14:30 15:30 15:30 16:30 17:30 17:30 17:30 18:00	TARG	9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	CUM	פרחכ	0.44	0.61	0.94	1.29	1.63	1.96	2.27	2.56	2.84	3.10	3.33	3.55	3.76	4.01	4.18	4.39	4.62	4.87
NCSU=Yes	GLUC	UTIL	0.63	79.0	99.0	0.71	0.68	0.65	0.62	0.57	0.57	0.52	97.0	0.43	0.43	67.0	0.34	0.43	0.44	0.50
MEDVOL=560	ADJ	RESIS	53.0	45.2	45.4	45.6	50.3	51.9	29.6	8.99	2.99	68.8	64.2	72.2	9.69	2.99	72.7	75.8	77.0	73.6
MED	ADJ	FLOW	1.06	1.08	1.06	1.05	1.07	1.08	1.07	1.06	1.08	1.09	1.09	1.05	1.06	1.08	1.07	1.07	1.05	1.07
GROUP=3 mg HD	VRE-	SIST	57.1	48.8	49.0	49.5	54.3	56.0	64.3	72.1	72.0	74.3	69.3	77.9	75.1	72.0	78.4	81.8	83.1	79.4
_	LACT	DEXT	0.77	98.0	0.91	0.89	0.93	0.94	96.0	0.97	0.88	0.88	0.93	96.0	0.93	0.83	1.16	0.97	0.99	0.00
DOSETIME=10:15	DEXT	ROSV	0.824	0.820	0.820	0.782	0.803	0.809	0.833	0.846	0.862	0.869	0.917	0.937	0.929	0.901	0.925	0.911	0.909	0.894
_	LACT	ATEV	0.252	0.291	0.310	0.330	0.327	0.318	0.310	0.289	0.258	0.233	0.221	0.217	0.209	0.210	0.207	0.215	0.232	0.234
FLAPWT=30.38 tinued)	DEXT	ROSA	1.150	1.160	1.160	1.150	1.150	1.140	1.150	1.140	1.150	1.130	1.150	1.160	1.150	1.150	1.100	1.130	1.140	1.150
PHASE=2 FLAPWT: (continued)	LACT	ATEA	0.000	0.00	0.00	0.003	0.004	900.0	0.005	0.004	0.004	0.003	0.005	0.002	0.003	0.004	0.004	0.003	0.004	0.004
	MEAN	FLOW	0.98	1.01	0.98	0.98	1.00	9.0	9.0	0.99	9.0	1.0	1.01	0.98	0.99	1.00	1.00	0.99	0.98	1.00
IMAL/SIDE=96-128-4-R	MED	TEMP	34.6	34.4	34.3	34.6	34.6	34.8	34.9	35.1	35.2	35.1	35.2	35.1	35.2	35.2	35.2	35.2	35.2	35.2
/SIDE=	æ	MEAN	26	65	48	48	24	26	79	7	22	23	2	92	7,4	22	28	81	81	2
AN I WAL,	ART	MEDPH	7.4	7.4	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
96/80.	HOM	DITY	39.4	40.1	40.4	40.5	40.6	40.2	40.3	39.6	39.1	39.0	39.0	38.6	37.4	37.3	37.0	37.3	36.9	36.6
DATE=02/08/96	AIR	TEMP	35.1	35.0	35.2	34.3	35.0	35.2	35.2	35.5	35.7	35.6	35.7	35.7	35.7	35.7	35.8	35.7	35.7	35.7
FLAPNO=2627	REL-	TIME	-0.25	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	2.00	5.50	9.00	6.50	7.00	7.50	8.00
- FLAPNO	ACTL	TIME	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15
	TARG	TIME	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15

0.01 0.19 0.38 0.58 0.58 0.58 1.27 1.74 1.74 1.27 1.27 1.27 1.27 4.03 4.63 5.16 5.16 5.16 0.81 0.72 0.74 0.98 0.98 0.98 0.98 0.67 0.67 0.67 0.55 0.55 NCSU=Yes 37.4 32.5 33.18 33.18 33.19 33.17 33.17 444.9 445.9 53.18 53.18 62.7 ADJ RESIS MEDVOL=513 ADJ FLOW ANIMAL/SIDE=96-128-4-L PHASE=2 FLAPWT=25.65 DOSETIME=10:00 GROUP=EtOH 37.0 32.2 33.1.5 33.1.5 33.0 33.0 444.3 444.3 444.3 57.0 62.0 LACT 0.752 0.829 0.829 0.788 0.758 0.755 0.775 0.839 0.839 0.854 0.854 0.854 0.854 0.854 0.854 0.854 0.854 0.854 DEXT ROSV 0.173 0.242 0.285 0.315 0.315 0.400 0.403 0.281 0.292 0.275 0.275 0.237 0.237 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170 1.170 0.000 0.005 0.005 0.005 0.005 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.20 335.44 335.37 355.37 335.37 35 BP MEAN ART MEDPH DATE=02/08/96 36.7 37.1 36.9 36.9 36.9 36.7 36.7 36.8 37.0 37.1 37.1 37.1 37.1 37.1 AIR TEMP -1.00 -0.75 -0.25 -0.25 -0.25 -0.50 FLAPN0=2628 ACTL TIME

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

:			;															!		
	OLUC CUM CUM	5.68 5.94 6.20		CUM	0.01	0.36	0.76	1.57	2.20	2.81	3.08	3.50	3.70	3.90	4.07	77.7	4.38		CUM	0.01 0.20 0.42 0.65 0.89
NCSU=Yes	GLUC UTIL	0.52 0.51 0.54	NCSU=Yes	GLUC UT1L	0.79	0.72	0.83	0.83	0.56	0.58	0.53	0.40	0.40	0.41	0.38	0.35	0.28	NCSU=Yes -	GLUC	0.63 0.77 0.88 0.93
	ADJ RESIS	64.8 68.8 69.8	MEDVOL=536	ADJ RESIS	46.0	40.5 39.9	37.2 36.4	37.0	55.5	2.06	74.0	67.1	62.7	59.8	62.9	58.0	51.4		10	49.8 45.8 43.2 36.3
MEDVOL=513	ADJ	1.00	MEDVO	ADJ FLOW	1.02	1.01	1.05	1.03	1.03	20.	1.03	1.03	1.05	50.1	1.02	1.02	3.5	MEDVOL=529	ADJ FLOW	1.02
GROUP=EtOH	VRE- SIST	64.0 68.0 69.0	GROUP=3 mg HD	VRE- SIST	47.5	41.8	38.4	38.2	57.3	93.4	76.4	69.3	64.7	61.8	65.0	59.9	53.1	GROUP=EtOH	VRE- SIST	50.8 46.7 43.7 44.0 37.0
	LACT	0.95		LACT	0.42	0.86	0.91	0.90	1.04	0.99	0.89	1.03	26.0	10.0	0.92	0.99	0.88		LACT	0.62 0.69 0.83 0.90
DOSETIME=10:00	DEXT	0.910 0.902 0.911	DOSETIME=10:15	DEXT	0.801	0.822	0.783	0.786	0.864	0.883	0.917	0.956	0.971	0.974	0.971	0.986	0.944	DOSETIME=10:30	DEXT	0.825 0.816 0.769 0.741 0.729
	LACT	0.213 0.209 0.213		LACT	0.148	0.277	0.329	0.332	0.260	0.256	0.210	0.186	0.168	0.162	0.159	0.157	0.154		LACT	0.174 0.234 0.319 0.366 0.392
FLAPWT=25.65 tinued)	DEXT	1.130 1.120 1.140	FLAPWT=26.12	DEXT	1.150	1.140	1.140	1.150	1.110	1.140	1.150	1.130	1.140	1.150	1.140	1.140	1.19	FLAPWT=25.66	DEXT	1.100 1.150 1.150 1.140
PHASE=2 FLAPWT (continued)	LACT	0.005 0.004 0.001		LACT	0.003	0.004	0.005	0.005	0.005	0.002	0.003	0.00	0.004	700.0	0.003	0.005	0.008	PHASE=2 FL	LACT	0.004 0.003 0.005 0.005
	MEAN	1.02	R PHASE=2	MEAN	0.98	1.02	1.02	0.1	1.00	0.99	1.00	1.0	1.02	5.5	0.99	0.99	0.98		MEAN	0.99 0.99 1.00 1.00
ANIMAL/SIDE=96-128-4-L	MED	35.5 35.5 35.5	(DE=96-56-5-R	MED	35.1	35.0 35.1	35.1 34.8	34.9	34.9	35.1	35.1	35.1	35.1	35.1	35.2	35.1	35.3	SIDE=96-56-5-L	MED	34.8 35.9 35.4 35.4
L/SIDE=	BP	69 69		BP MEAN	43	7 5	38	38	57	2 2	2 5	3 6	%!	S &	3	29	52		BP MEAN	50 44 37
	ART MEDPH	7.4	ANIMAL/S	ART MEDPH	7.4	7.7	7.4	7.4	7.4	7.4	7.4	7.4	7.4	4.7	7.4	7.4	7.4	S ANIMAL/	ART	4.7.7.7.7.4.4.7.7.4
96/80/	HUMI	32.9 32.7 32.7	14/96	HUMI	33.0	32.8 32.4	32.0 32.0	32.4 32.0	32.2	31.6	32.1	31.9	31.3	31.0	31.2	31.5	31.4	DATE=02/14/96	HUMI	31.5 32.0 31.7 30.4 29.8
DATE=02/08/96	AIR TEMP	37.1 37.1 37.2	DATE=02/14/96	AIR	36.3 36.6	37.7 36.7	36.8 36.7	36.7 36.6	36.7	36.7	36.8	36.9	36.9	36.9	36.9	37.0	37.0	DATE=0	AIR	36.1 37.2 37.1 37.3 37.8
FLAPNO=2628	REL- TIME	7.00 7.50 8.00	FLAPN0=2629 [REL- TIME	-1.00	-0.50	0.00	1.00	2.00	3.00	3.50	4.50	5.00	. v	6.50	7.00	8.00	FLAPN0=2630	REL- TIME	-1.00 -0.75 -0.50 -0.25 0.00
FLAPN	ACTL TIME	17:00 17:30 18:00	- FLAPNO	ACTL TIME	9:15	9:45 10:00	10:15 10:45	11:15	12:15	13:15	13:45	14:45	15:15	14:41	16:45	17:15	18:15	FLAP	ACTL	9:30 9:45 10:00 10:15
1 4 3 1 1 4 0 4	TARG	17:00 17:30 18:00		TARG	9:15 9:30	10:00	10:15 10:45	11:15	12:15	13:15	13:45	14:45	15:15	16.15	16:45	17:15	18:15		TARG	9:30 9:45 10:00 10:15

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	OU10 CUM	1.38	2.75	3.56	4.20	4.75	5.19	5.55	5.89
NCSU=Yes	GLUC	0.98	0.88	0.70	0.59	0.51	0.40	0.37	0.36
-529	ADJ RESIS	38.3	53.2	54.9	49.8	49.5 51.9	55.5	60.5	61.8
MEDVOL=529	ADJ FLOW	1.02	1.08	1.02	9.0	1.03	1.01	1.0	1.00
GROUP=EtOH	VRE- SIST	39.0	45.0	56.0	50.8	50.5	56.6 62.6	61.6	62.9
	LACT	1.00	0.99	0.98	1.11	1.01	0.99	1.04	1.08
DOSETIME=10:30	DEXT	0.731	0.752	0.851	0.884	0.922	0.967	0.990	0.975
	LACT	0.396	0.380	0.297	0.287	0.224	0.176	0.170	0.176
FLAPWT=25.66 inued)	DEXT	1.150	1.130	1.150	1.140	1.140	1.140	1.150	1.130
PHASE=2 FLAPW (continued	LACT	0.006	0.006	0.004	0.003	0.003	0.005	0.004	0.008
	MEAN	988	1.00	8.8	0.0	1.01	0.99	0.99	0.99
ANIMAL/SIDE=96-56-5-L	MED	35.7	. 55 E	35.8	35.8	35.9	35.9	35.8	35.9
AL/SID	BP	32	5 5 5	26 25	S S	54	5 61	2 6	8 2
	ART MEDPH	7.4	7.7	7.4	7.4	7.4	7.4	7.4	7.4
DATE=02/14/96	HUMI DITY	29.9	29.6	29.7	29.5	27.6	29.4	29.1	28.8
DATE=	AIR	37.7	37.8	37.8	37.9	37.9	37.9	37.8	38.0
FLAPN0=2630	REL- TIME	1.00	2.00	3.50	4.50	5.00	6.00	7.00	8.00
· FLA	ACTL TIME	11:00	12:30	13:30	14:30	15:30	16:30 17:00	17:30	18:30
	TARG	11:00	12:30	13:30	14:30	15:30	16:30 17:00	17:30	18:30

0.01 0.19 0.19 0.50 0.50 0.55 0.55 2.26 2.27 2.28 2.29 4.06 4.06 4.06 6.29 NCSU=Yes 63.8 49.5 41.12 41.12 41.12 41.12 41.13 41 ADJ RESIS MEDVOL=583 ADJ FLOW DOSETIME=10:00 GROUP=3 mg HD VRE-SIST 0.14 0.36 0.036 0.037 0.093 0.094 0.094 0.094 0.094 0.096 0.096 0.096 0.096 0.096 LACT DEXT 0.778 0.796 0.860 0.860 0.840 0.840 0.812 0.814 0.814 0.814 0.817 0.817 0.817 0.817 0.717 0.717 0.717 0.717 0.051 0.125 0.176 0.176 0.245 0.285 0.297 0.298 0.291 0.291 0.318 0.318 0.318 0.387 0.387 0.387 LACT ANIMAL/SIDE=96-56-4-L PHASE=2 FLAPWT=27.24 1.120 1.130 1.130 1.120 1.120 1.120 1.120 1.130 DEXT 0.003 0.005 0.005 0.005 0.007 0.007 0.011 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.99 0.99 0.99 0.099 0.099 0.099 0.099 0.099 0.099 MEAN 334.76 346 346 346 346 346 346 346 34 BP MEAN ART Medph ***************** DATE=02/15/96 332.0 334.0 335.0 337.0 337.0 337.0 347.0 347.0 347.0 347.0 347.0 347.0 347.0 347.0 HUMI 335.50 -1.00 -0.75 REL-TIME FLAPN0=2632 ACTL TIME

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	CUM	92.9	es	CUM	0.01																	OLUG MUD	0.01
	GLUC	0.94	NCSU=Yes	GLUC	0.90	1.06	1.16			0.05										20 X-112018	NC30-163	GLUC UTIL	0.80 0.62 0.77 0.87
	ADJ RESIS	62.3	MEDVOL=511	ADJ RESIS	33.9	29.3	31.3	32.7	37.3	39.8 47.0	50.3	50.8	49.2	50.8	50.3	55.9	58.3	57.0	53.4	10000A	-707	ADJ RESIS	34.5 36.0 35.1
	ADJ FLOW	1.12	HD MED	ADJ FLOW	0.97	0.99	6.0	0.98	96.0	1.08	0.99	0.0	0.97	0.98	0.97	0.98	0.99	96.0	0.96	2	200	ADJ FLOW	1.07
	VRE- SIST	70.0	GROUP=3 mg h	VRE- SIST	33.3	28.9	30.8	32.2	36.7	39.2 46.3	49.5	0.02	48.5	20.0	49.5	55.0	57.4	56.1	52.6	10.00	JOY E LOR	VRE- SIST	37.6 39.2 38.2 39.4
	LACT	0.92		LACT	0.64	0.91	0.94	0.97	0.98	0.97	0.86	0.83	0.99	0.79	0.9	. 6	0.98	0.92	0.8			LACT	0.57 0.79 0.89 0.91
	DEXT ROSV	0.693	DOSETIME=10:14	DEXT	0.795	0.764	0.728	0.742	0.777	0.871	0.902	0.962	1.010	0.992	1.010	1.010	1.030	1.000	0.990	03.00-241	7 - 1 ME - 7	DEXT ROSV	0.819 0.889 0.834 0.790
	LACT	0.402		LACT	0.213	0.349	0.391	0.402	0.358	0.337	0.227	0.179	0.153	0.140	0.131	0.136	0.131	0.136	0.148			LACT	0.196 0.210 0.283 0.338
(pen	DEXT	1.120	FLAPWT=21.39	DEXT	1.120	1.140	1.140	1.150	1.140	1.150	1.160	1.170	1.160	1.160	1,150	1.150	1.160	1.140	1.150	1, 3C-Ti Ide 12	- IMLWI	DEXT	1.150
(continued)	LACT	0.011		LACT	0.005	0.005	0.004	0.005	0.003	0.004	0.004	0.006	0.005	0.007	0.004	0.00	0.004	0.007	0.002	S C-33FIG		LACT	0.002
	MEAN	1.00	-R PHASE=2	MEAN	0.99	1.01	1.0	. 6	0.98	1.00	1.01	9.5	0.99	1.00	66.0	. 6	1.01	0.98	0.99			MEAN	1.00
	MED	34.9	DE=96-66-11-R	MED	34.6	35.0	35.1	35.0	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.0	1-11-77-70-11-1	-30-00-	MED	33.9 34.6 34.6
	BP	2	/SIDE=	BP	33	8		32	38	36 44	20	0,0	48	20	64	25	28	52	215			BP	39
	ART MEDPH	7.4	ANIMAL/SI	ART MEDPH	7.4	7.4	7.4	7.4	7.4	4.7	7.4	7.4	7.4	7.4	7.4	7.7	7.4	7.4	7.5	ANTWA		ART Medph	44.7.7.7.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.
	HUMI DITY	33.6	721/96	HUMI	36.4	35.5	35.4	35.3	35.3	35.6	34.8	34.4 24.4	34.5	34.5	33.9	33.9	33.9	33.8	33.4	201 PC1 CO-31 VOX	76/61/7	HUMI	38.1 38.1 38.1
	AIR	35.4	DATE=02/21/96	AIR TEMP	36.3	36.8	36.8	36.9	37.0	36.9	36.9	36.9	36.8	36.8	36.8	36.9	36.9	36.9	36.9			AIR	35.4 36.5 36.9
	REL- TIME	8.00	FLAPN0=2633	REL- TIME	-0.98	-0.48	-0.23	0.52	1.02	1.52	2.52	3.02	4.02	4.52	5.02	6.02	6.52	7.02	8.02	727C-ONG 13	F02-0N4	REL- TIME	-0.73 -0.73 -0.23
	ACTL TIME	18:00	- FLAPNO	ACTL TIME	9:15	9:45	10:00	10:45	11:15	11:45	12:45	13:15	14:15	14:45	15:15	16:15	16:45	17:15	17:45	10	¥7.	ACTL TIME	9:00 9:15 9:30 9:45
	TARG	18:00	1	TARG	9:15	9:45	10:00	10:45	11:15	11:45	12:45	13:15	14:15	14:45	15:15	16:15	16:45	17:15	17:45			TARG	9:00 9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

:			:		
1 1 1 0 6 6 6	CUM	2.2 2.2 3.2 3.3 3.1 4.2 4.2 4.2 5.2 5.2 5.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8	90.0	OLUC MUD	0.00 0.38 0.57 1.18 3.27 2.93 3.27 4.35 5.45 5.75 6.73
NCSU=Yes	GLUC	0.98 0.90 0.90 0.61 0.54 0.54 0.48 0.46	U.4U NCSU=Yes -	GLUC UTIL	1.31 0.78 0.77 0.77 0.84 0.84 0.56 0.56 0.56 0.57 0.57
	ADJ RESIS	27.8 23.5 23.5 23.5 25.0 26.0 56.0 56.2 65.3 65.3	S1	ADJ RESIS	26.8 27.1 27.0 26.8 26.2 26.2 28.0 27.7 47.2 47.2 47.2 56.5 56.5 56.5 56.5 96.9 97.5
MEDVOL=565	ADJ FLOW	89.000000000000000000000000000000000000	1.06 62.0 MEDVOL=564	ADJ FLOW	1.08 1.08 1.08 1.08 1.08 1.09 1.09 1.09 1.09 1.09
GROUP=E tOH	VRE- SIST	30.3 43.0 46.8 52.8 52.4 62.1 63.6 63.6 63.6 64.6 71.1	GROUP=EtOH	VRE- SIST	29.1 29.1 29.1 29.1 28.3 30.5 30.5 30.5 51.8 51.8 51.8 51.8 51.8 51.8 51.8 51
	LACT	0.99 0.99 0.99 0.99 0.95 1.07 1.03 1.03		LACT	0.25 0.86 0.90 0.97 0.93 1.00 1.00 1.13 0.93 1.20 1.10 1.10
DOSETIME=9:59	DEXT	0.735 0.756 0.811 0.835 0.927 0.928 0.958 0.958	169 U.979 U. DOSETIME=10:15	DEXT	0.620 0.812 0.816 0.756 0.778 0.778 0.753 0.904 0.905 0.934 0.919 0.923 0.938
	LACT	0.394 0.391 0.376 0.352 0.314 0.245 0.225 0.215 0.216 0.184		LACT	0.134 0.194 0.249 0.287 0.323 0.347 0.368 0.268 0.270 0.226 0.226 0.226 0.226 0.227 0.231 0.228
PHASE=2 FLAPWT=25.14 (continued)	DEXT	1.150 1.160 1.150 1.150 1.150 1.150 1.150 1.150	1.15U U. FLAPWT=24.24	DEXT	1.150 1.130 1.110 1.110 1.130 1.130 1.130 1.140 1.140 1.140 1.130 1.130 1.130 1.130
ASE=2 FLAPW (continued)	LACT	0.002 0.002 0.002 0.002 0.004 0.004 0.005 0.006	PHASE=2 FL	LACT	0.002 0.005 0.006 0.008 0.009 0.007 0.012 0.009 0.009 0.009 0.009 0.010
	MEAN	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0		MEAN	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
SIDE=96-66-11-L	MED	24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	6 34.8 U. SIDE=96-67-5-R	MED	3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
AL/SIDE	BP	287728888888888		BP	25
ANIMAL/	ART MEDPH	444444444444		ART Medph	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
2/21/96	HUMI	38.0 36.9 36.9 36.9 36.9 36.0 36.0 36.0 36.0 36.0 36.0 36.0 4.0 36.0 4.0 36.0 4.0 36.0 4.0 36.0 4.0 36.0 4.0 36.0 4.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36	57.0 54.8 DATE=02/22/96	HUMI	335.5 355.5 355.5
DATE=02/21/96	AIR TEMP	37.3 37.3 37.0 37.0 37.0 37.0 37.0 37.0	S7.U DATE=0	AIR	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
- FLAPNO=2634	REL- TIME	1.52 2.52 3.62 3.52 3.52 5.02 5.02 5.02 5.02 5.02 5.02 5.02 5	UU 8.UZ FLAPNO=2635	REL- TIME	-1.00 -0.75 -0.55
FLAP	ACTL TIME	11:30 12:00 13:00 13:00 14:30 14:30 15:00 16:30 17:00	18:00	ACTL TIME	9:15 9:30 9:35 10:00 10:15 11:15 12:45 13:45 14:15 14:15 15:45 16:15 16:15 17:15
	TARG	11:30 12:30 13:00 14:30 15:30 15:30 16:30 17:00 17:30	18:00	TARG	9 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	GLUC	0.01 0.20 0.35 0.48	0.63 1.28 1.61 2.29 5.29	3.55 3.55 3.55 3.55 3.55 3.55 3.55 3.55	OLUG CUM CUM	0.00 0.20 0.60 0.60 0.80 1.25 1.68 2.48 2.48 3.34 3.37 4.35 4.15
NCSU=Yes	GLUC	0.99	0.62 0.65 0.65 0.65 0.68	6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00	NCSU=Yes GLUC UTIL	1.10 0.75 0.03 0.085 0.085 0.075 0.51 0.51 0.39
MEDVOL=526	ADJ RESIS	48.1 49.1 51.8 46.6	41.0 42.7 38.9 31.1 44.3	62.3 62.1 62.1 62.8 67.8 72.4 71.0	MEDVOL=486 ADJ ADJ	34.3 31.3 31.3 31.3 34.3 34.3 36.0 36.0 48.2 48.2 48.2 46.3 36.0 46.3 36.0 46.3 36.0 46.0 36.0 46.0 36.0 46.0 36.0 46.0 36.0 46.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0 3
MEDVO	ADJ FLOW	00.1.00	1.00	200000000000000000000000000000000000000	MEDVC ADJ FLOW	0.92 0.93 0.93 0.93 0.93 0.93 0.93
=3 mg HD	VRE- SIST	48.7 49.8 52.5 47.2	41.6 43.3 39.4 44.9 43.8	62.5. 62.5. 63.5. 63.7. 73.7. 73.7. 73.7. 73.7.	SS.U =3 mg HD VRE- SIST	22.5 28.9 29.9 29.9 29.9 33.7 45.6 45.6 45.6 45.6 45.6 45.6 45.6 45.6
GROUP=3	LACT	0.34	0.88 0.96 1.04 0.99	0.93 0.93 0.93 0.93 0.93		0.29 0.67 1.01 1.03 1.03 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05
DOSETIME=9:59	DEXT	0.723 0.833 0.897 0.910	0.860 0.877 0.878 0.851 0.856 0.861	0.845 0.876 0.884 0.884 0.881 0.881 0.881	DOSETIME=9:58 ACT DEXT TEV ROSV	0.628 0.798 0.802 0.733 0.757 0.757 0.800 0.811 0.914 0.916 0.933
	LACT	0.137 0.157 0.172 0.189	0.235 0.251 0.245 0.287 0.278 0.275	0.265 0.254 0.254 0.259 0.267 0.267	U. CCC .5 DOSET LACT ATEV	0.153 0.232 0.301 0.372 0.389 0.389 0.364 0.364 0.264 0.254 0.216 0.216
FLAPWT=23.79	DEXT	1.120	1.120	1.120 1.120 1.120 1.120 1.120 1.100	FLAPWT=27.	1.140 1.140 1.140 1.140 1.150 1.150 1.150 1.150 1.150 1.140
	LACT	0.002	0.007 0.008 0.008 0.008 0.007	0.009 0.010 0.010 0.011 0.011	PHASE=2 FLIN LACT	0.002 0.003 0.003 0.003 0.004 0.004 0.004 0.007 0.007 0.008 0.008
·L PHASE=2	MEAN	1.00	0.99 0.99 0.99 0.99	900000000000000000000000000000000000000	-R - F - F - F - F - F - F - F - F - F -	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
MAL/SIDE=96-67-5-	MED	33.9 34.4 34.4	24.9.9.9.9.9.3 24.9.3.4.3.4.9.9.9.9.9.9.9.9.9.9.9.9.9.9.	35.0 35.1 35.1 35.1 35.1 35.1 35.1 35.1	50 55.5 rside=96-69-11 bp med rean temp	%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
L/STDE:	BP	48 52 47	776 777 777 777 777 777 777 777	223386628336	JO L/SIDE: BP MEAN	2001 2001 2001 2001 2001 2001 2001 2001
ANIMA	ART MEDPH	4.7.4 7.4 7.4	4444444	444444444	ANIMA ART MEDPH	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
/22/96	HUM I DITY	35.3 34.0 32.8 32.1	32.1 31.5 31.5 32.5 32.9	33.1 32.2 32.3 32.3 32.3 32.3	71.5 HUM1 DITY	8
DATE=02/22/96	AIR	35.3 35.8 36.2	36.7 36.7 36.7 36.6	36.8 36.8 36.8 36.8 36.8 36.8 36.8 36.8	DATE=03/06/96 AIR HUMI TEMP DITY	35.9 36.2 36.2 36.3 36.3 36.7 36.7 36.7 36.7 36.7 36.7
FLAPN0=2636	REL- TIME	-0.98 -0.73 -0.48	0.00 0.52 1.02 2.52 3.02	5.52 6.52 7.52 7.52 7.52 7.52 7.52 7.53	FLAPNO=2637 CTL REL-	-0.72 -0.47 -0.47 -0.22 0.00 0.53 1.53 1.53 2.03 2.03 2.03 2.03 3.53 4.03 4.03 5.03 5.03
- FLAPN	ACTL TIME	9:00 9:15 9:45	9:59 10:30 11:00 12:00 12:30	15:30 16:00 16:00 17:30 17:30	- FLAPN ACTL TIME	9:00 9:15 9:15 9:15 9:15 9:15 9:15 9:15 9:15
	TARG			13.30 14.30 15.00 15.30 16.30 17.30 17.30	:	9:00 9:15 9:45 10:00 11:00 11:30 12:30 12:30 14:00 14:30 15:00 15:00 15:00

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

:			;				
	OLUG GLUG	4.31 4.46 4.60 4.75 4.89		OLUC GLUC	0.01 0.36 0.37 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23	OU SUL	0.01
NCSU=Yes -	GLUC	0.31 0.31 0.29 0.29	NCSU=Yes -	GLUC UTIL	1.23 0.69 0.84 0.85 0.95 0.95 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	GLUC UTIL	0.68 0.83 0.73
MEDVOL=486	ADJ RESIS	60.4 55.3 53.1 52.6 50.7	MEDVOL=510	ADJ RESIS	99 51.6 01 30.6 01 25.8 00 25.9 99 26.3 99 26.3 99 31.2 99 31.2 99 35.9 97 40.3 97 40.3 98 42.7 98 42.7 98 42.7 99 42.3	ADJ RESIS	31.7 28.3 45.3
MEDVC	ADJ FLOW	0.93 0.94 0.93 0.93	MEDVC	ADJ FLOW		ADJ FLOW	1.01
GROUP=3 mg HD	VRE- SIST	56.6 51.7 49.8 49.2 47.5	GROUP=3 mg HD	VRE- SIST	18 50.7 64 30.1 7 91 25.4 1 90 25.5 99 25.9 60 25.9 60 27.6 1 97.6 60 30.8 60 60 30.8 60 60 30.8 60 60 30.8 60 60 30.8 60 60 30.8 60 60 30.8 60 60 30.8 60 60 30.8 60 60 30.8 60 60 30.8 60 60 60 30.8 60 60 60 30.8 60 60 60 30.8 60 60 60 30.8 60 60 60 30.8 60 60 60 30.8 60 60 60 30.8 60 60 60 60 60 60 60 60 60 60 60 60 60	VRE- SIST	31.8 28.4 45.5
	LACT	1.27 1.20 1.23 1.06		LACT		LACT	0.52
DOSETIME=9:58	DEXT	0.986 1.000 1.010 0.995 1.010	DOSETIME=9:43	DEXT	112 0.547 0.805 0.805 0.805 0.805 0.815 0.815 0.815 0.815 0.815 0.751 0.770 0.770 0.770 0.870 0.870 0.841 0.947 0.930 0.	DEXT	0.628 0.714 0.761
	LACT	0.191 0.177 0.169 0.152 0.142		LACT		LACT	0.178 0.239 0.288
FLAPWT=27.5 tinued)	DEXT	1.130 1.140 1.140 1.130	FLAPWT=29.16	DEXT	5 1.140 6 1.150 6 1.150 6 1.150 6 1.150 6 1.140 6 1.140 6 1.140 8 1.140 8 1.140 8 1.140 9 1.140 9 1.140 9 1.140 6 1.130	DEXT	0.960 1.110 1.120
PHASE=2 FLAPWT (continued)	LACT	0.008 0.009 0.009 0.009		LACT	000000000000000000000000000000000000000	LACT	0.004
	MEAN	0.99 0.99	-L PHASE=2	MEAN	1.01 0.0 1.03 0.0 1.03 0.0 1.02 0.0 1.01 0.0 1.01 0.0 1.02 0.0 1.00 0.0 1.00 0.0 1.00 0.0 1.00 0.0 1.00 0.0 1.00 0.0 1.00 0.0	MEAN	1.01
ANIMAL/SIDE=96-69-11-R	MED	35.1 35.1 35.1 35.1	IDE=96-69-11-L	MED	7.4 51 34.9 7.4 26 35.8 7.4 26 35.5 7.4 26 35.5 7.4 26 35.6 7.4 28 35.6 7.4 31 35.5 7.4 31 35.5 7.4 36 35.5 7.4 36 35.3 7.4 38 35.3 7.4 40 35.3 7.4 42 35.3	MED	34.1 34.3 34.3
-/SIDE=	BP	52 50 50 47	/SIDE=9	BP MEAN	51 26 26 26 26 26 26 26 27 31 31 31 31 44 44 45 46 47 47 47 47 47 47 47 47 47 47 47 47 47	BP MEAN	32 53 42
ANIMAL	ART MEDPH	4.7.7. 4.7.7. 4.7.7.	ANIMAL/S	ART Medph	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.	ART Medph	7.4
96/90/	HUMI	32.3 32.8 32.4 32.2 32.1	96/90	HUMI DITY	38.8 35.0 34.4 34.4 35.0 32.1 32.1 32.1 32.1 32.2 32.2 32.3 32.2 32.3 32.3	HUMI	32.8 33.6 33.1
DATE=03/06/96	AIR TEMP	36.7 36.7 36.7 36.8 36.8	DATE=03/06/96	AIR	36.3 38.8 36.5 35.0 37.6 34.6 34.4 34.4 34.4 34.4 34.4 34.4 37.5 33.6 32.1 37.5 32.2 32.2 37.2 33.1 37.2 33.1 37.2 32.4 37.2 32.2 37.2 32.4 37.2 3	AIR	35.9 36.0 36.1
FLAPNO=2637	REL- TIME	6.03 6.53 7.03 7.53 8.03		REL- TIME	* AI * AI C A A A A A A A A A A A A A A A A A	REL- TIME	-0.98 -0.73 -0.48
- FLAPN	ACTL TIME	16:00 16:30 17:00 18:00	FLAPN0=2638	ACTL TIME	8:45 -0.99 9:10 -0.72	ACTL TIME	9:15 9:30 9:45
	TARG	16:00 16:30 17:00 17:30 18:00		TARG	8:45 9:15 9:15 9:45 10:45 11:15 12:45 14:4	TARG	9:15 9:30 9:45

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

	WINC CUM GLUC	0.56	0.74	1.19	1.66	2.15	2.62	2.99	3.32	3.59	3.85	4.10	4.35	4.58	4.83	5.05	5.26	5.47	5.69	
NCSU=Yes	GLUC UTIL	99.0	5.0	0.88	0.92	0.98	0.94	0.75	99.0	0.53	0.52	0.52	0.50	0.45	0.49	0.45	0.42	0.41	0.44	
MEDVOL=521	ADJ RESIS	31.9	30.1	27.0	25.9	26.8	32.9	36.8	40.4	50.8	42.6	9.95	9.65	51.8	53.9	54.5	53.3	54.3	54.3	
	ADJ FLOW	1.03	1.03	1.00	0.1	1.01	1.00	0.98	1.01	1.00	1.01	1.01	1.01	1.00	0.98	0.98	1.01	0.99	0.99	
GROUP=3 mg HD	VRE- SIST	32.0	30.2	27.1	26.0	26.9	33.0	36.9	9.04	51.0	45.8	8.94	8.65	52.0	54.1	54.4	53.5	54.5	54.5	
	LACT	0.88	0.0	0.89	0.93	0.0	0.93	0.94	96.0	0.88	0.0	0.00	0.94	0.97	98.0	0.93	1.04	1.06	0.94	
DOSETIME=10:14	DEXT ROSV	0.797	0.751	0.688	0.669	0.654	0.669	0.742	0.803	0.863	0.867	0.878	0.887	0.888	0.886	0.883	0.917	0.907	0.892	
	LACT	0.283	0.330	0.394	0.431	0.441	0.439	0.372	0.315	0.239	0.243	0.242	0.242	0.230	0.226	0.227	0.225	0.231	0.224	
FLAPWT=29.31 tinued)	DEXT	1.110	1.110	1.120	1.120	1.130	1.130	1.120	1.120	1.120	1.120	1.130	1.130	1.110	1.130	1.110	1.120	1.10	1.110	
PHASE=2 FLAPWT: (continued	LACT	0.006	900.0	0.00	0.011	0.014	0.011	0.015	0.012	0.014	0.015	0.015	0.014	0.015	0.015	0.015	0.014	0.015	0.019	
	MEAN	1.03	1.03	9.1	1.00	1.01	1.00	0.98	1.01	1.00	1.0	1.0	1.0	9.	0.98	0.98	1.0	0.99	0.99	
ANIMAL/SIDE=96-69-10-R	MED	34.4	34.3	34.4	34.4	34.4	34.5	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.6	34.6	34.6	
/SIDE=	BP MEAN	33	31	27	92	22	33	36	41	21	95	47	20	25	23	23	24	24	54	
ANIMAL,	ART MEDPH	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	
96/20/	HUMI	32.1	32.5	32.2	31.8	31.6	32.5	32.1	31.9	31.4	31.9	32.0	32.0	31.9	30.6	31.5	31.5	30.7	30.8	
DATE=03/07/96	AIR TEMP	36.2	36.1	36.3	36.3	36.3	36.3	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.5	36.4	36.4	
FLAPN0=2639	REL- TIME	-0.23	0.00	0.52	1.02	1.52	2.05	2.52	3.02	3.52	4.02	4.52	5.05	5.55	6.02	6.52	7.02	7.52	8.02	
. FLAPNI	ACTL TIME	10:00	10:14	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	
	TARG	10:00	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45	14:15	14:45	15:15	15:45	16:15	16:45	17:15	17:45	18:15	

0.01 0.21 0.21 0.67 0.67 0.67 1.43 2.49 2.89 3.30 4.62 4.63 4.63 5.17 NCSU=Yes 0.92 0.81 0.86 0.97 11.04 11.05 11.07 0.59 0.59 0.59 0.33 0.38 MEDVOL=485 31.8 29.3 26.1 26.1 26.2 33.1 33.1 33.1 34.2 47.3 50.0 50.3 ADJ RESIS ADJ FLOW 0.92 0.92 0.93 0.93 0.93 0.93 0.93 0.93 全 29.7 27.4 27.4 26.0 28.1 38.5 38.5 38.5 47.5 47.5 47.5 47.5 DOSETIME=10:00 GROUP=3 mg 0.43 0.67 0.87 0.93 0.95 0.95 0.95 0.95 0.95 1.01 1.15 LACT 0.648 0.668 0.543 0.572 0.575 0.575 0.533 0.685 0.677 0.776 0.776 0.890 0.890 0.890 DEXT ROSV 0.223 0.315 0.472 0.672 0.574 0.574 0.587 0.452 0.452 0.238 0.228 0.228 0.236 LACT ANIMAL/SIDE=96-69-10-L PHASE=2 FLAPWT=33.61 1.120 1.120 1.120 1.120 1.100 1.100 DEXT 0.003 0.007 0.008 0.008 0.008 0.008 0.011 0.011 0.014 0.015 0.015 1.00 MEAN 34.2 34.7 34.7 34.7 334.7 335.7 355.7 335.7 355. BP MEAN ART Medph 31.0 331.0 331.0 331.0 331.1 331.1 331.2 331.2 331.2 331.2 331.2 331.2 331.2 331.2 331.2 DATE=03/07/96 AIR 35.7 36.1 36.3 36.5 36.5 36.8 36.8 36.8 36.8 36.9 36.9 37.0 37.0 37.0 -1.00 -0.075 -0. FLAPN0=2640 ACTL TIME

TASK 92-31 DATA LISTING OF VIABLE FLAPS FOR EXPERIMENTS USING ISLER GENETICS PIGS AND MALLENKRODT BSA

;		
	GLUC	5.31
NCSU=Yes	GLUC	0.29
/OL=485	ADJ RESIS	41.7
MED	ADJ FLOW	0.93
GROUP=3 mg HD MEDVOL=485	VRE- SIST	39.0 42.8 42.8
O GROU	LACT	1.17
DOSETIME=10:00	DEXT	0.949
	LACT	0.205
PHASE=2 FLAPWT=33.61 (continued)	DEXT	1.120
=2 FLA (contir	LACT	0.016
	MEAN	1.00
ANIMAL/SIDE=96-69-10-L	MED	35.4 35.4 35.4
'SIDE=9	BP MEAN	£3 62 36
ANIMAL,	ART MEDPH	7.4
96/20	HUMI	31.9 32.0 31.7
ATE=03/	AIR	37.0 37.0 37.0
2640 D	REL- TIME	7.00 7.50 8.00
FLAPNO=	ACTL TIME	17:00 17:30 18:00
FLAPNG=2640 DATE=03/07/96	TARG	17:00 17:30 18:00
:		